### Ordering method

<table>
<thead>
<tr>
<th>YA-RJ</th>
<th>4L</th>
<th>YAC100</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model</strong></td>
<td><strong>Power cable length</strong></td>
<td><strong>Controller</strong></td>
</tr>
<tr>
<td>6-axis</td>
<td>4L: 4m</td>
<td>YAC100</td>
</tr>
</tbody>
</table>

### Specifications

<table>
<thead>
<tr>
<th>Controlled Axis</th>
<th>Payload</th>
<th>Repeatability</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-axis (turning)</td>
<td>1 kg (max. 2 kg)</td>
<td>+/-0.3 mm</td>
</tr>
<tr>
<td>L-axis (lower Arm)</td>
<td>-160° to +160°</td>
<td></td>
</tr>
<tr>
<td>U-axis (upper arm)</td>
<td>-90° to +110°</td>
<td></td>
</tr>
<tr>
<td>R-axis (wrist roll)</td>
<td>-180° to +180°</td>
<td></td>
</tr>
<tr>
<td>B-axis (wrist pitch/yaw)</td>
<td>-130° to +130°</td>
<td></td>
</tr>
<tr>
<td>T-axis (wrist twist)</td>
<td>-360° to +360°</td>
<td></td>
</tr>
</tbody>
</table>

### Range of Motion

- **S-axis (turning)**: -160° to +160°
- **L-axis (lower Arm)**: -90° to +110°
- **U-axis (upper arm)**: -290° to +105°
- **R-axis (wrist roll)**: -180° to +180°
- **B-axis (wrist pitch/yaw)**: -130° to +130°
- **T-axis (wrist twist)**: -360° to +360°

### Axis with brake

- **L-axis, U-axis**

### Maximum Speed

- **S-axis (turning)**: 2.79 rad/s, 160°/s
- **L-axis (lower Arm)**: 2.27 rad/s, 130°/s
- **U-axis (upper arm)**: 3.49 rad/s, 200°/s
- **R-axis (wrist roll)**: 5.23 rad/s, 300°/s
- **B-axis (wrist pitch/yaw)**: 6.88 rad/s, 400°/s
- **T-axis (wrist twist)**: 8.72 rad/s, 500°/s

### Allowable Moment

- **R-axis (wrist roll)**: 3.33 N.m
- **B-axis (wrist pitch/yaw)**: 3.33 N.m
- **T-axis (wrist twist)**: 0.98 N.m

### Allowable Inertia

- **R-axis (wrist roll)**: 0.058 kg.m²
- **B-axis (wrist pitch/yaw)**: 0.058 kg.m²
- **T-axis (wrist twist)**: 0.005 kg.m²

### Mass

- **6-axis**: 15 kg

### Ambient Conditions

- **Temperature**: During operation: 0 to +40°C, During storage: -10 to +60°C
- **Relative Humidity**: 90% max. (non-condensing)
- **Vibration Acceleration**: 4.9 m/s² or less
- **Free from corrosive gasses or liquids, or explosive gasses**
- **Free from exposure to water, oil, or dust**
- **Free from excessive electrical noise (plasma)**

### Power Requirements

- 0.5 kVA

### Note

1. When a load is more than 1 kg, the motion range will be smaller. Use the robot within the recommended motion range. (See diagrams below)
2. The S-, R-, B-, and T-axes do not have any brakes. Make sure that the operation does not require brakes.
3. Varies in accordance with applications and motion patterns. Note. Si units are used for specifications.