### Ordering method

<table>
<thead>
<tr>
<th>Model</th>
<th>Power cable length</th>
<th>Controller</th>
<th>Safety standard</th>
<th>Language setting</th>
<th>Option I/O</th>
<th>Network option</th>
</tr>
</thead>
<tbody>
<tr>
<td>YA-R3F</td>
<td>4L</td>
<td>YAC100</td>
<td>Safety rated</td>
<td>Safety rated</td>
<td>Option</td>
<td>Option</td>
</tr>
</tbody>
</table>

- **Controller**: YAC100
- **Safety standard**: Safety rated
- **Language setting**: Safety rated
- **Option I/O**: Option
- **Network option**: Option

Note. This unit can also be used in combination with a travel axis or other external axis. Please contact us.

Note. Floor-mounted, wall-mounted, and ceiling-mounted types are available. Please contact us separately regarding wall-mounted or ceiling-mounted installations.

Note. Standard models include four air hoses (diameter: 4 mm), and an internal user I/O wiring harness (0.2 mm²) running through the U-arm. This structure simplifies wiring and tubing for easier system construction.

Note. This unit can also be used in combination with a travel axis or other external axis. Please contact us.

### Specifications

#### Controlled Axis

- **Payload**: 3 kg
- **Repeatability**: +/-0.03 mm

#### Range of Motion

<table>
<thead>
<tr>
<th>S-axis (turning)</th>
<th>R-axis (wrist roll)</th>
<th>B-axis (wrist pitch/yaw)</th>
<th>T-axis (wrist twist)</th>
</tr>
</thead>
<tbody>
<tr>
<td>-160° to +160°</td>
<td>-170° to +170°</td>
<td>-120° to +120°</td>
<td>-360° to +360°</td>
</tr>
<tr>
<td>-85° to +90°</td>
<td>-105° to +260°</td>
<td>-120° to +120°</td>
<td>-360° to +360°</td>
</tr>
<tr>
<td>-105° to +260°</td>
<td>-170° to +170°</td>
<td>-120° to +120°</td>
<td>-360° to +360°</td>
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<td>-85° to +90°</td>
<td>-105° to +260°</td>
<td>-120° to +120°</td>
<td>-360° to +360°</td>
</tr>
</tbody>
</table>

#### Maximum Speed

<table>
<thead>
<tr>
<th>S-axis (turning)</th>
<th>L-axis (lower Arm)</th>
<th>U-axis (upper arm)</th>
<th>B-axis (wrist roll)</th>
<th>B-axis (wrist pitch/yaw)</th>
<th>T-axis (wrist twist)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.49 rad/s, 200°/s</td>
<td>2.62 rad/s, 150°/s</td>
<td>3.32 rad/s, 190°/s</td>
<td>5.24 rad/s, 300°/s</td>
<td>5.24 rad/s, 300°/s</td>
<td>7.33 rad/s, 420°/s</td>
</tr>
</tbody>
</table>

#### Allowable Moment

<table>
<thead>
<tr>
<th>Axis (wrist roll)</th>
<th>5.39 N·m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Axis (wrist pitch/yaw)</td>
<td>5.39 N·m</td>
</tr>
<tr>
<td>Axis (wrist twist)</td>
<td>2.94 N·m</td>
</tr>
</tbody>
</table>

#### Allowable Inertia

<table>
<thead>
<tr>
<th>Axis (wrist roll)</th>
<th>0.1 kg·m²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Axis (wrist pitch/yaw)</td>
<td>0.1 kg·m²</td>
</tr>
<tr>
<td>Axis (wrist twist)</td>
<td>0.03 kg·m²</td>
</tr>
</tbody>
</table>

#### Mass

<table>
<thead>
<tr>
<th>Temperature</th>
<th>0 to +40°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humidity</td>
<td>20 to 80%RH (non-condensing)</td>
</tr>
<tr>
<td>Vibration</td>
<td>4.9 m/s² or less</td>
</tr>
</tbody>
</table>

#### Power Requirements

- **0.5 kW**

### YA-R3F

**Maximum payload**: 3 kg

**Longest Reach**: R532 mm

#### Controlled Axis

- 6

#### Payload

- 3 kg

#### Repeatability

- +/-0.03 mm

#### Range of Motion

- **S-axis (turning)**: 
  -160° to +160°
- **L-axis (lower Arm)**: 
  -85° to +90°
- **R-axis (wrist roll)**: 
  -170° to +170°
- **B-axis (wrist pitch/yaw)**: 
  -120° to +120°
- **T-axis (wrist twist)**: 
  -360° to +360°

#### Maximum Speed

- **S-axis (turning)**: 
  3.49 rad/s, 200°/s
- **L-axis (lower Arm)**: 
  2.62 rad/s, 150°/s
- **U-axis (upper arm)**: 
  3.32 rad/s, 190°/s
- **B-axis (wrist roll)**: 
  5.24 rad/s, 300°/s
- **B-axis (wrist pitch/yaw)**: 
  5.24 rad/s, 300°/s
- **T-axis (wrist twist)**: 
  7.33 rad/s, 420°/s

Note 1. Motion range of point P when the S-axis is between -40° to +40°.

Note 2. Varies in accordance with applications and motion patterns.

Note 3. SI units are used for specifications.