### RCA2-RP4N

**ROBO Cylinder**

- **Type**: Mini Rod Type
- **Motor**: 24V Motor
- **Mounting Type**: Short-Length Tapped-Hole Mounting Type
- **Ball Screw/Lead Screw**: Integrated

**Configuration**:

- **Series**: RCA2 - RP4N
- **Type**: 1 - 20 - 30
- **Encoder**: Incremental
- **Motor**: 20 : 20W Servo Motor
- **Lead**: 6mm ball screw
- **Stroke**: 30mm

**Compatible Controllers**:

- A1 : ACON
- A2 : RACON
- A3 : AMEC
- ASEP

**Cable Length**:

- **Option**: LA : Power-saving

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**Actuator Specifications**

#### Stroke and Maximum Speed

<table>
<thead>
<tr>
<th>Model</th>
<th>Lead Screw</th>
<th>Feed Screw</th>
<th>Load (mm)</th>
<th>Max. Lead Capacity (mm)</th>
<th>Rated Thrust (N)</th>
<th>Repeatability (mm)</th>
<th>Stroke (mm)</th>
<th>Speed (mm/s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RCA2-RP4N-i-20-6-30-1-2-3</td>
<td>Ball Screw</td>
<td>6</td>
<td>2</td>
<td>0.5</td>
<td>33.8</td>
<td>±0.02</td>
<td>30(Flat6)</td>
<td>200</td>
</tr>
<tr>
<td>RCA2-RP4N-i-20-4-30-1-2-3</td>
<td>Ball Screw</td>
<td>4</td>
<td>3</td>
<td>0.75</td>
<td>50.7</td>
<td>±0.02</td>
<td>30(Flat6)</td>
<td>200</td>
</tr>
<tr>
<td>RCA2-RP4N-i-20-2-30-1-2-3</td>
<td>Lead Screw</td>
<td>2</td>
<td>6</td>
<td>1.5</td>
<td>101.5</td>
<td>±0.02</td>
<td>30(Flat6)</td>
<td>100</td>
</tr>
<tr>
<td>RCA2-RP4N-i-20-8S-30-1-2-3</td>
<td>Lead Screw</td>
<td>6</td>
<td>0.25</td>
<td>0.125</td>
<td>19.9</td>
<td>±0.05</td>
<td>30(Flat6)</td>
<td>200</td>
</tr>
<tr>
<td>RCA2-RP4N-i-20-4S-30-1-2-3</td>
<td>Lead Screw</td>
<td>4</td>
<td>0.5</td>
<td>0.25</td>
<td>29.8</td>
<td>±0.05</td>
<td>30(Flat6)</td>
<td>100</td>
</tr>
<tr>
<td>RCA2-RP4N-i-20-2S-30-1-2-3</td>
<td>Lead Screw</td>
<td>2</td>
<td>1</td>
<td>0.5</td>
<td>59.7</td>
<td>±0.02</td>
<td>30(Flat6)</td>
<td>100</td>
</tr>
</tbody>
</table>

**Cable List**

- **Type**: P, S, M
- **Cable Symbol**: X, N
- **Standard Price**: (Unit: mm)

**Option List**

- **Name**: Connector cable exit direction
- **Option Code**: K2
- **See Page**: A-32
- **Standard Price**: –

**Power-saving**

- **Option Code**: LA
- **See Page**: A-32
- **Standard Price**: –

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**Technical References**

1. The load screw is not equipped with an anti-rotation device. Therefore, when using the actuator, add an anti-rotation device such as a guide to the end of the load screw prior to use. (Without an anti-rotation device, the load screw will rotate, and will not extend or retract.)
2. The load capacity is based on operation at an acceleration of 0.3G (0.2G for the 2mm-lead model), lead screw model, or when used vertically. This is the upper limit of the acceleration.
3. Do not apply any external force on the rod from any direction other than the direction of the rod's motion.
4. When using the lead screw model, please use it for applications that are suitable for its characteristics. (See page Pre-42 for more information.)

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**RCA2**

- **Name**: ROBO Cylinder
- **Type**: RCA2-RP4N
- **Standard Price**: 183
**1** A motor-encoder cable is connected here. See page A-39 for details on cables.

**2** When homing, the rod moves to the mechanical end; therefore, please watch for any interference with the surrounding objects.

**3** The orientation of the bolt will vary depending on the product.

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**Dimensions**

For Special Orders  P. A-9

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**1** Compatible Controllers

The RCA2 series actuators can operate with the controllers below. Select the controller according to your usage.

<table>
<thead>
<tr>
<th>Name</th>
<th>Model</th>
<th>Description</th>
<th>Max. Positioning Points</th>
<th>Input Voltage</th>
<th>Power Supply Capacity</th>
<th>Standard Price</th>
<th>See Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solenoid Valve Type</td>
<td>AMEC-C-20[1]-NP-2-1</td>
<td>Easy-to-use controller, even for beginners</td>
<td>3 points</td>
<td>AC100V</td>
<td>2.4A rated</td>
<td>–</td>
<td>P477</td>
</tr>
<tr>
<td></td>
<td>ASEZ-P-20[1]-NP-2-0</td>
<td>Operable with same signal as solenoid valve.</td>
<td></td>
<td>DC24V</td>
<td>1.3A rated</td>
<td>–</td>
<td>P487</td>
</tr>
<tr>
<td>Splash-Proof Solenoid</td>
<td>ASEZ-CW-20[1]-NP-2-0</td>
<td>Valve supports both single and double solenoid types. No homing necessary with single solenoid type.</td>
<td></td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Positioner Type</td>
<td>ACON-C-20[1]-NP-2-0</td>
<td>Positioning is possible for up to 512 points</td>
<td>512 points</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Positioner Type</td>
<td>ACON-CG-20[1]-NP-2-0</td>
<td>–</td>
<td></td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Pulse Train Input Type</td>
<td>ACON-PL-20[1]-NP-2-0</td>
<td>Pulse train input type with differential line driver support</td>
<td>–</td>
<td>DC24V</td>
<td>(Standard) 1.3A rated</td>
<td>–</td>
<td>PS35</td>
</tr>
<tr>
<td></td>
<td>ACON-PG-20[1]-NP-2-0</td>
<td>Pulse train input type with open collector support</td>
<td>–</td>
<td>–</td>
<td>2.5A max.</td>
<td>–</td>
<td>PS35</td>
</tr>
<tr>
<td>Pulse Train Input Type</td>
<td>ACON-SC-20[1]-NP-2-0</td>
<td>–</td>
<td></td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Serial Communication Type</td>
<td>ACON-SQ-20[1]-NP-2-0</td>
<td>Dedicated to serial communication</td>
<td>64 points</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Field Network Type</td>
<td>RACON-20[1]</td>
<td>Dedicated to field network</td>
<td>768 points</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>PS33</td>
</tr>
<tr>
<td>Program-Control Type</td>
<td>ASEL-C-1[1]-XZ-1-IP-2-0</td>
<td>Programmed operation is possible on up to 2 axes.</td>
<td>1500 points</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>P587</td>
</tr>
</tbody>
</table>

* This is for the single-axis ASEL.

*[1] is a placeholder for the code “LA” if the power-saving option is specified.