**Actuator Specifications**

### Lead and Load Capacity

**Stroke and Maximum Speed**

Due to the characteristics of the Pulse motor, the RCP2 series’ load capacity decreases at high speeds. In the table below, check if your desired speed and load capacity are supported.

<table>
<thead>
<tr>
<th>Model</th>
<th>Lead (mm)</th>
<th>Max. Load Capacity (Note 1)</th>
<th>Stroke (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RCP2W-SA16C-I-86P-8-1</td>
<td>4</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>RCP2W-SA16C-I-86P-4-1</td>
<td>4</td>
<td>8</td>
<td>4</td>
</tr>
</tbody>
</table>

*See page Pr-35 for explanation of each code that makes up the configuration name.

### Cable List

<table>
<thead>
<tr>
<th>Type</th>
<th>Cable Symbol</th>
<th>Standard Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
<td>P.1m</td>
<td>~</td>
</tr>
<tr>
<td>M.5m</td>
<td>M.5m</td>
<td>~</td>
</tr>
<tr>
<td>Special Lengths</td>
<td>X06(8mm) ~ X10(10mm)</td>
<td>~</td>
</tr>
<tr>
<td></td>
<td>X11(11mm) ~ X15(15mm)</td>
<td>~</td>
</tr>
<tr>
<td>Robot Cable</td>
<td>R01(1mm) ~ R03(3mm)</td>
<td>~</td>
</tr>
<tr>
<td></td>
<td>R04(4mm) ~ R05(5mm)</td>
<td>~</td>
</tr>
<tr>
<td></td>
<td>R06(6mm) ~ R10(10mm)</td>
<td>~</td>
</tr>
<tr>
<td></td>
<td>R11(11mm) ~ R15(15mm)</td>
<td>~</td>
</tr>
<tr>
<td></td>
<td>R16(16mm) ~ R20(20mm)</td>
<td>~</td>
</tr>
</tbody>
</table>

*See page A-39 for cables for maintenance.

### Actuator Specifications

**Option List**

<table>
<thead>
<tr>
<th>Name</th>
<th>Option Code</th>
<th>See Page</th>
<th>Standard Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>With cover</td>
<td>CO</td>
<td>~444</td>
<td>~</td>
</tr>
<tr>
<td>Reversed-home</td>
<td>NM</td>
<td>~A-33</td>
<td>~</td>
</tr>
</tbody>
</table>

# Splash-Proof

**Options**

- Stroke
- 3
- P2
- 1
- 8
- 6P
- 50
- 50
- 443

**Stroke (mm) Standard Price**

<table>
<thead>
<tr>
<th>Stroke (mm)</th>
<th>Without cover</th>
<th>With cover</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>100</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>150</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>200</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>250</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>300</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>350</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>400</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>450</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>500</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>550</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>600</td>
<td>~</td>
<td>~</td>
</tr>
</tbody>
</table>

**Notes on Selection**

1. The actuator is limited to being installed horizontally. Please note that it can’t be used when installed in a wrong direction (transverse, vertical or reversed). (The same goes for storage.)
2. When the stroke increases, the maximum speed will drop to prevent the ball screw from reaching the critical rotational speed. Use the actuator specification table below to check the maximum speed at the stroke you desire.
3. Since the RCP2 series use a pulse motor, the load capacity decreases at high speeds. Check in the Speed vs. Load Capacity graph to see if your desired speed and load capacity are supported.
4. The load capacity is based on operation at an acceleration of 0.2G. 0.2G is the upper limit for the acceleration.
5. The cable joint connector is not splash-proof; secure it in a place that is not prone to water spills.

**Actuator Specifications**

- Type
- Encoder
- Motor
- Lead
- Stroke
- Compatible Controller
- Cable Length
- Option

**Configuration**

**Series**

<table>
<thead>
<tr>
<th>Type</th>
<th>Encoder</th>
<th>Motor</th>
<th>Lead</th>
<th>Stroke</th>
<th>P2</th>
<th>Compatible Controller</th>
<th>Cable Length</th>
<th>Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>86P</td>
<td>8IP: Pulse motor</td>
<td>56: High Output</td>
<td>4: 4mm</td>
<td>50</td>
<td>50</td>
<td>PCON-CF50</td>
<td>50~600</td>
<td></td>
</tr>
</tbody>
</table>

**Speed vs. Load Capacity**

Due to the characteristics of the Pulse motor, the RCP2 series’ load capacity decreases at high speeds. In the table below, check if your desired speed and load capacity are supported.

- Load Capacity (kg) vs. Speed (mm/sec)
- From 0 to 200 mm/sec
- Load Capacity (kg) vs. Speed (mm/sec)
- From 0 to 200 mm/sec

**Table/Arm/Flat Type**

- AMEC
- PMEC
- SCON
- ACON
- PCON
- PSEP
- ASEL
- NET
- RCP2W-SA16C
- Mini
- Slider
- ROBO Cylinder
- Water-proof Slider Type
- 158mm Width
- Pulse Motor
- Coupled

**Technical References**

- P. A-5

**References**

1. Lead and Load Capacity
2. Stroke and Maximum Speed
3. Actuator Specifications
4. Option List
5. Cable List

**Next Page**

- The actuator is limited to being installed horizontally. Please note that it can’t be used when installed in a wrong direction (transverse, vertical or reversed). (The same goes for storage.)
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**Actuator Specifications**

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- Motor
- Lead
- Stroke
- Compatible Controller
- Cable Length
- Option

**Configuration**

**Series**

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<th>Type</th>
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<th>Motor</th>
<th>Lead</th>
<th>Stroke</th>
<th>P2</th>
<th>Compatible Controller</th>
<th>Cable Length</th>
<th>Option</th>
</tr>
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<tbody>
<tr>
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<td>56: High Output</td>
<td>4: 4mm</td>
<td>50</td>
<td>50</td>
<td>PCON-CF50</td>
<td>50~600</td>
<td></td>
</tr>
</tbody>
</table>

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- Load Capacity (kg) vs. Speed (mm/sec)
- From 0 to 200 mm/sec

**Table/Arm/Flat Type**

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- ACON
- PCON
- PSEP
- ASEL
- NET
- RCP2W-SA16C
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- ROBO Cylinder
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- The cable joint connector is not splash-proof; secure it in a place that is not prone to water spills.
Dimensions

[No Cover]

4-Ø drilled, ø14 deep counterbores, depth 8.5.

* For the reverse-home model, the dimensions (distance to home) on the motor-side and that on the opposite side are flipped.

[With Cover] (Optional)

4-Ø drilled, ø14 deep counterbores, depth 8.5.

Dimensions/Weight by Stroke

<table>
<thead>
<tr>
<th>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>
<th>450</th>
<th>500</th>
<th>550</th>
<th>600</th>
</tr>
</thead>
<tbody>
<tr>
<td>L</td>
<td>490</td>
<td>540</td>
<td>590</td>
<td>640</td>
<td>690</td>
<td>740</td>
<td>790</td>
<td>840</td>
<td>890</td>
<td>940</td>
<td>990</td>
<td>1040</td>
</tr>
<tr>
<td>A</td>
<td>335</td>
<td>385</td>
<td>435</td>
<td>485</td>
<td>535</td>
<td>585</td>
<td>635</td>
<td>685</td>
<td>735</td>
<td>785</td>
<td>835</td>
<td>885</td>
</tr>
<tr>
<td>B</td>
<td>365</td>
<td>415</td>
<td>465</td>
<td>515</td>
<td>565</td>
<td>615</td>
<td>665</td>
<td>715</td>
<td>765</td>
<td>815</td>
<td>865</td>
<td>915</td>
</tr>
<tr>
<td>C</td>
<td>56</td>
<td>120</td>
<td>150</td>
<td>200</td>
<td>250</td>
<td>300</td>
<td>350</td>
<td>400</td>
<td>450</td>
<td>500</td>
<td>550</td>
<td>600</td>
</tr>
</tbody>
</table>

Weight without cover (kg)

| Stroke | 9   | 9.4 | 9.9 | 10.4 | 10.9 | 11.3 | 11.8 | 12.3 | 12.7 | 13.2 | 13.7 | 15.1 |

Weight with cover (kg)

| Stroke | 10.5| 11.1| 11.6| 12.5 | 13.2 | 13.6 | 14.1 | 14.6 | 15.3 | 15.9 | 16.6 | 17.3 |

Compatible Controllers

The controller for the RCP2W-SA16C type is a dedicated controller.

<table>
<thead>
<tr>
<th>Name</th>
<th>External View</th>
<th>Model</th>
<th>Description</th>
<th>No. Positioning Points</th>
<th>Input Voltage</th>
<th>Max. Current</th>
<th>Standard Price</th>
<th>See Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positioner Type</td>
<td></td>
<td>PCON-CF-86PI-NP-2-0</td>
<td>Positioning possible for up to 512 points</td>
<td>512 points</td>
<td>DC24V</td>
<td>6A max.</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

Note: Please note that the encoder cable is a dedicated CF-type cable that is different from the PCON-C/CG/CY/PL/PO/SE controllers.