Actuator Specifications

**Actuator Specifications**

**RCP2CR-SS8C** Cleanroom ROBO Cylinder  
Slider Coupling Type 80mm Width  
Pulse motor  
Steel Base

- **Configuration:** RCP2CR- SS8C - I - 56P - Encoder  
  Lead - Stroke - Compatible Controller - Cable Length - Option

- **ELECTROMATE**  
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  www.electromate.com  
sales@electromate.com  
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**Lead and Load Capacity**

**Model** | **Load (mm) (mm)** | **Horizontal [mm]** | **Vertical [mm]** | **Stroke (mm) 50 – 1000 (50mm increments)**
---|---|---|---|---
RCP2CR-SS8C-I-56P-20- | 1 | 2 | 3 | 4 | 5 | 10 – 40 | 5

- **Legend:**  
  Stroke □  Compatible controller □  Cable length □  Options

**Stroke List**

- **Stroke (mm)** | **Standard Price**
---|---
50/100 | ~
100/200 | ~
250/300 | ~
350/400 | ~
450/500 | ~
550/600 | ~
650/700 | ~
750/800 | ~
850/900 | ~
950/1000 | ~

**Load Capacity**

- **Model** | **Load (mm)** | **Max. Load Capacity (kg)** | **Stroke (mm)** |
---|---|---|---
RCP2CR-SS8C-I-56P-20- | 1 | 2 | 3 | 4 | 5 | 10 – 40 | 5

**Special Lengths**

- **Type** | **Cable Symbol** | **Standard Price**
---|---|---
Standard Type | P (1m) | ~
X (2m) | ~
M (3m) | ~
N (4m) | ~
Special Lengths | X06 (8m) | X10 (10m) | ~
X11 (11m) | X15 (15m) | ~
X16 (16m) | X20 (20m) | ~
Robot Cable | R01 (1m) | R03 (3m) | ~
R04 (4m) | R05 (5m) | ~
R06 (6m) | R10 (10m) | ~
R11 (11m) | R15 (15m) | ~
R16 (16m) | R20 (20m) | ~

**Options**

- **Name** | **Option Code** | **See Page** | **Standard Price**
---|---|---|---
Brake | B | A-20 | ~
Reversed-home | NM | A-33 | ~
Intake port on opposite side | VR | A-38 | ~

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**Actuator Specifications**

**RCP2CR-SS8C**

- **Series** | **Type** | **Encoder** | **Motor** | **Lead** | **Stroke** | **Compatible Controller** | **Cable Length** | **Option**
---|---|---|---|---|---|---|---|---
P | 56P | 16“ size | 20: 20mm | 50: 50mm | 100: 1000mm (50mm pitch increments) | P1: PCON | N: Home | B: Brake

---

**Notes**

1. 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.

2. Since the RCP2 series use the pulse motor, the load capacity decreases at high speeds. In the Speed vs. Load Capacity graph on the right, see if your desired speed and load capacity are supported.

3. The load capacity is based on operation at an acceleration of 0.3G (0.2G for the 5mm-lead model, or when used vertically). This is the upper limit of the acceleration.

4. 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.

---

**Speed vs. Load Capacity**

**Stroke, Max. Speed, and Suction Volume**

**Model** | **Load (mm)** | **Max. Speed (mm/s)** | **Suction Volume (Nl/min)**
---|---|---|---
RCP2CR-SS8C-I-56P-20- | 1 | 2 | 3 | 4 | 5 | 10 – 40 | 5

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**Notes**

- See page A-39 for cables for maintenance.

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**Related Content**

- See page A-39 for cables for maintenance.

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**Technical References**

- See page A-5

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**Legend**

- **□ Stroke**  
  - **Compatible controller**  
  - **Cable length**  
  - **Options**

---

**Options**

- **Name** | **Option Code** | **See Page** | **Standard Price**
---|---|---|---
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**References**

- See page A-5 for cables for maintenance.
**Dimensions**

For Special Orders

![Image](image-url)

*1 The motor-encoder cable is connected here. See page A-39 for details on cables.

*2 When homing, the slider moves to the ME; therefore, please watch for any interference with the surrounding objects.

ME: Mechanical end
SD: Stroke end

*3 Reference position for calculating the moment Ma.

![Diagram](diagram-url)

For Special Orders

<table>
<thead>
<tr>
<th>Dimensions and Weight by Stroke</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stroke</td>
</tr>
<tr>
<td>A</td>
</tr>
<tr>
<td>B</td>
</tr>
<tr>
<td>C</td>
</tr>
<tr>
<td>D</td>
</tr>
<tr>
<td>F</td>
</tr>
<tr>
<td>Weight (kg)</td>
</tr>
</tbody>
</table>

**Compatible Controllers**

The RCP2CR series actuators can operate with the controllers below. Select the controller according to your usage.

<table>
<thead>
<tr>
<th>Name</th>
<th>External Use</th>
<th>Model</th>
<th>Description</th>
<th>Input Voltage</th>
<th>Power Supply Capacity</th>
<th>Standard Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solenoid Valve Type</td>
<td>PMEC-C-SER-MP-0-1</td>
<td>Easy-to-use controller; even for beginners</td>
<td>AC100V</td>
<td>See P401</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PMEP-C-SER-MP-0-2</td>
<td>Operate with same signal as solenoid valve. Supports both single and double solenoid types. No homing necessary with simple solenoid type.</td>
<td>AC220V</td>
<td>—</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PMEP-CW-SER-MP-0-2</td>
<td>—</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positioner Type</td>
<td>PCON-C-SER-MP-0-2</td>
<td>Positioning is possible for up to 512 points</td>
<td>DC24V</td>
<td>28 max.</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Safety-Compliant Positioner Type</td>
<td>PCON-CG-SER-MP-0-2</td>
<td>—</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pulse Train Input Type (Differential Line Driver)</td>
<td>PCON-RL-SER-MP-0-2</td>
<td>Pulse train input type with differential line driver support</td>
<td>—</td>
<td>—</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PCON-RD-SER-MP-0-2</td>
<td>Pulse train input type with open collector support</td>
<td>—</td>
<td>—</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Serial Communication Type</td>
<td>PCON-SE-SER-MP-0-2</td>
<td>Dedicated to serial communication</td>
<td>—</td>
<td>—</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Field Network Type</td>
<td>BRCON-REP</td>
<td>Dedicated to field network</td>
<td>—</td>
<td>—</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Program-Control Type</td>
<td>PSEL-C-1-SER-MP-0-2</td>
<td>Programmed operation is possible. Operation is possible on up to 2 axes</td>
<td>—</td>
<td>—</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*1 This is for the single-axis PSEL.

*2 This is a placeholder for the power supply voltage (1: 100V, 2: 100 ~ 240V).