**Actuator Specifications**

### Lead and Load Capacity

**Model**

- **RCP2-SS7R-I-42P-12**: Horizontal: 12, Vertical: ~20
- **RCP2-SS7R-I-42P-6**: Horizontal: 6, Vertical: ~20
- **RCP2-SS7R-I-42P-3**: Horizontal: 3, Vertical: ~30

**Stroke (mm)**: 50 ~ 600

**Max. Load Capacity (Note 1)**: Horizontal: ~20, Vertical: ~4

**Stroke (mm)**: 50 ~ 600

**Max. Load Capacity (Note 1)**: Horizontal: ~20, Vertical: ~4

### Stroke and Maximum Speed

- **Stroke (mm)**: 50 ~ 600
- **Max. Load Capacity (Note 1)**: Horizontal: ~20, Vertical: ~4

**Legend**

- □: Stroke
- ■: Compatible controller
- □: Cable length
- □: Options

### Cable List

- **Type**: Standard, Special Lengths, Robot Cable
- **Cable Symbol**: P, N, M
- **Cable Length**: X20, X15, X10, R15, R10, R5
- **Standard Price**: ~

### Option List

- **Name**: Brake, Incremental Encoder, Left-Mounted Motor, Right-Mounted Motor, Linear Slide Roller
- **Option Code**: B, K, ML, MR, SR
- **See Page**: ~

### Actuator Specifications

- **Drive System**: Ball screw Ø10mm, C10 grade
- **Positioning Repeatability**: ±0.005mm
- **Lost Motion**: 0.1mm or less
- **Base**: Material: Special alloy steel
- **Allowable Static Moment**: Ma: 79.4 Nm, Mb: 79.4 Nm, Mc: 172.9 Nm
- **Allowable Dynamic Moment**: Ma: 14.7 Nm, Mb: 14.7 Nm, Mc: 33.3 Nm
- **Overhang Load**: Ma direction: 300mm or less, Mb: 300mm or less
- **Allowable Operating Temp. Humidity**: 0 ~ 40°C, 85% RH or less (Non-condensing)

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**Notes on Selection**

1. **Selection Note**: See Options below
2. **Selecting Note**: See Options below
3. **Selected Note**: See Options below
4. **Special Note**: See Options below
5. **Option Note**: See Options below
6. **Option Code Note**: See Options below

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**Technical References**

- A-5

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RCP2-ROBO Cylinder Specification

- **Model**: RCP2-SS7R
- **Series**: I
- **Type**: 42P
- **Encoder**: Incremental
- **Motor**: Pulse motor
- **Lead**: 42 mm
- **Stroke**: 12 mm
- **Compatible Controllers**: P1:PCON, P2:PMGC, P3:PMGC
- **Cable Length**: N: None

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**Options**

- **Option List**: Brake, Incremental Encoder, Left-Mounted Motor, Right-Mounted Motor, Linear Slide Roller
- **See Page**: ~

**Cable List**

- **Type**: Standard, Special Lengths, Robot Cable
- **Cable Symbol**: P, N, M
- **Cable Length**: X20, X15, X10, R15, R10, R5
- **Standard Price**: ~

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**Sales & Service**

- Electromate
- Toll Free Phone: (877) SERVO98
- Toll Free Fax: (877) SERVO99
- www.electromate.com
- sales@electromate.com

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**Product Info**

- **Model**: RCP2-SS7R
- **Description**: Left-mounted motor model (ML).

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**Technical Details**

- **Configuration**: RCP2-SS7R-I-42P
- **Compatible Controllers**: P1:PCON, P2:PMGC, P3:PMGC
- **Cable Length**: N: None

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**Additional Information**

- **Special Notes**: See Options below
- **Technical Notes**: See Options below
- **Sales Information**: See Options below
For the reversed-home model, the dimensions (distance to home) on the motor-side and that on the opposite side are flipped.

* The reference surface is the same as the SS7C type. (See P34)
* The offset reference position for the moment Ma is the same as the reference surface is the same as the SS7C type. (See P34)

Adding a brake increases the actuator’s overall dimensions.
Dimensions of the brake section

1: The motor-encoder cable is connected here.
2: When homing, the slider moves to the ME; therefore, please watch for any interference with the surrounding objects. M.E.: Mechanical end
SE: Stroke end
The dimensions enclosed in ‘*’ are reference dimensions.

Dimensions of the Oblong Hole

* Adding a brake increases the actuator’s overall length by 24.5mm and its weight by 0.3kg.

For Special Orders

<table>
<thead>
<tr>
<th>Dimensions/Weight by Stroke</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stroke</td>
</tr>
<tr>
<td>L</td>
</tr>
<tr>
<td>R</td>
</tr>
<tr>
<td>D</td>
</tr>
<tr>
<td>M</td>
</tr>
<tr>
<td>Weight (kg)</td>
</tr>
</tbody>
</table>

2 Compatible Controllers
The RCP2 series actuators can operate with the controllers below. Select the controller according to your usage.

<table>
<thead>
<tr>
<th>Name</th>
<th>External View</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>PMEC-C-42P-MP-2-J</td>
<td>Easy-to-use controller, even for beginners</td>
<td>3 points</td>
<td>AC100V</td>
<td>See P461</td>
<td>–</td>
<td>–</td>
<td>P467</td>
</tr>
<tr>
<td></td>
<td>PSEP-C-42P-MP-2-0</td>
<td>Operate with same signal as solenoid valve. Supports both single and double solenoid types. No wiring necessary with simple absolute type.</td>
<td>–</td>
<td>AC200V</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>P467</td>
</tr>
<tr>
<td></td>
<td>PMEC-C-42P-MP-2-J</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>PSEP-C-42P-MP-2-0</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Soldered Positional Type</td>
<td>PCON-C-24P-MP-2-J</td>
<td>Positioning is possible for up to 512 points</td>
<td>512 points</td>
<td>DC24V</td>
<td>3A max.</td>
<td>–</td>
<td>–</td>
<td>P525</td>
</tr>
<tr>
<td></td>
<td>PCON-C-24P-MP-2-J</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Safety-Compliant Positional Type</td>
<td>PCON-C-24P-AP-2-J</td>
<td>Pulse train input type with differential line driver support</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Pulse Train Input Type (Different Line Driver)</td>
<td>PCON-E-24P-AP-2-J</td>
<td>Pulse train input type with open collector support</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Pulse Train Input Type (Open Collector)</td>
<td>PCON-E-24P-AP-2-J</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Servo Communication Type</td>
<td>PCON-E-24P-AP-2-J</td>
<td>Dedicated to serial communication</td>
<td>64 points</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>P531</td>
</tr>
<tr>
<td>Field Network Type</td>
<td>PCON-E-24P-AP-2-J</td>
<td>Dedicated to field network</td>
<td>768 points</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>P531</td>
</tr>
<tr>
<td>Program Control Type</td>
<td>PCON-E-24P-AP-2-J</td>
<td>Programmed operation is possible Can operate up to 2 axes</td>
<td>1024 points</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>P531</td>
</tr>
</tbody>
</table>

* For Special Orders

*1: The motor-encoder cable is connected here.

*2: When homing, the slider moves to the ME; therefore, please watch for any interference with the surrounding objects. M.E.: Mechanical end
SE: Stroke end

* The reference surface is the same as the SS7C type. (See P34)
* The offset reference position for the moment Ma is the same as the reference surface is the same as the SS7C type. (See P34)

*1: The motor-encoder cable is connected here.

*2: When homing, the slider moves to the ME; therefore, please watch for any interference with the surrounding objects. M.E.: Mechanical end
SE: Stroke end

* The dimensions enclosed in ‘*’ are reference dimensions.

** For Special Orders

* This is for the single-axis PSEL.

* 1: a placeholder for the power supply voltage (1: 100V / 2: 100 – 240V).