RCP2 ROBO Cylinder

RCP2-RA4C ROBO Cylinder Rod Type 45mm Width Pulse Motor Straight Type

Configuration:
- RCP2 – RA4C – I – 42P
- Encoder: Incremental
- Motor: Pulse motor
- Lead: 10 : 10mm
- Stroke: 50 : 50mm

* The Simple absolute encoder is also considered type "I".

* See page Pre-35 for an explanation of the naming convention.

Actuator Specifications

- **Stroke List**
  - Stroke (mm): 50
  - Standard Price: 
  - 100
  - 150
  - 200
  - 250
  - 300

- **Lead and Load Capacity**
  - Model: RCP2-RA4C-I-42P-10
  - Lead (mm): 10
  - Max. Load Capacity (Note 1): Horizontal (kg) 25
  - Vertical (kg) 4.5
  - (50mm increments)

- **Stroke and Maximum Speed**
  - Stroke (mm): 10
  - Maximum Speed (mm/s): 458
  - 250
  - 350

- **Options**
  - Brake
  - Flange
  - Foot bracket
  - Reversed-home

- **Cable List**
  - Type: Standard
  - Cable Symbol: B
  - Standard Price: 
  - Special Lengths:
    - X06 (6m) ~ 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)

- **Technical References**: P. A-5

Notes on Selection:
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 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.
3. The load capacity is based on operation at an acceleration of 0.2G. 0.2G is the upper limit of the acceleration. In addition, the horizontal load capacity is based on the use of an external guide. If an external force is exerted on the rod from a direction other than the motion of the rod, the detent may become damaged.

RCP2-RA4C-I-42P-5: Lead (2.5mm) 
RCP2-RA4C-I-42P-10: Lead (5mm) 
RCP2-RA4C-I-42P-2.5: Lead (2.5mm)

Technical References P. A-5

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

* See page A-39 for cables for maintenance.
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>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-42PI-NP-2-1</td>
<td>Easy-to-use controller, even for beginners</td>
<td>3 points</td>
<td>AC100V</td>
<td>See P481</td>
<td>–</td>
<td>P487</td>
</tr>
<tr>
<td></td>
<td>PSEP-C-42PI-NP-2-0</td>
<td>Operable with same signal as solenoid valve. Supports both single and double solenoid types.</td>
<td>–</td>
<td>DC24V</td>
<td>2A max.</td>
<td>–</td>
<td>P487</td>
</tr>
<tr>
<td></td>
<td>PSEP-CW-42PI-NP-2-0</td>
<td>Operable with same signal as solenoid valve.</td>
<td>–</td>
<td>AC200V</td>
<td>–</td>
<td>–</td>
<td>P487</td>
</tr>
<tr>
<td>Positioner Type</td>
<td>PCON-C-42PI-NP-2-0</td>
<td>Positioning is possible for up to 512 points</td>
<td>512 points</td>
<td>AC100V</td>
<td>See P546</td>
<td>–</td>
<td>P546</td>
</tr>
<tr>
<td></td>
<td>PCON-CG-42PI-NP-2-0</td>
<td>Positioning is possible for up to 512 points</td>
<td>512 points</td>
<td>AC100V</td>
<td>See P546</td>
<td>–</td>
<td>P546</td>
</tr>
<tr>
<td></td>
<td>PCON-PL-42PI-NP-2-0</td>
<td>Pulse train input type with differential line driver support</td>
<td>–</td>
<td>DC24V</td>
<td>2A max.</td>
<td>–</td>
<td>P525</td>
</tr>
<tr>
<td></td>
<td>PCON-PO-42PI-NP-2-0</td>
<td>Pulse train input type with differential line driver support</td>
<td>–</td>
<td>DC24V</td>
<td>2A max.</td>
<td>–</td>
<td>P525</td>
</tr>
<tr>
<td></td>
<td>PCON-SE-42PI-N-0-0</td>
<td>Dedicated to serial communication</td>
<td>64 points</td>
<td>AC24V</td>
<td>–</td>
<td>–</td>
<td>P535</td>
</tr>
<tr>
<td></td>
<td>RPCON-42P</td>
<td>Dedicated to field network</td>
<td>768 points</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>P503</td>
</tr>
<tr>
<td></td>
<td>PSEL-C-1-42PI-NP-2-0</td>
<td>Programmed operation is possible</td>
<td>1500 points</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>P507</td>
</tr>
</tbody>
</table>

* This is for the single-axis PSEL.
* 1 is a placeholder for the power supply voltage (1: 100V, or 2: 100–240V).