RCP2CR-HS8C Cleanroom ROBO Cylinder
High-Speed Slider Coupling Type
80mm Width
Pulse motor
Steel Base

**Configuration**
- **RCP2CR-HS8C**
- **I-86P**
- **P2**
- **N**
- **B**

**Motor**
- 86P: Pulse motor
- 50: high output

**Load**
- 30: 30mm

**P2**: PCON-CF

**Series**
- I: Incremental

**Encoder**
- HS8C

**Compatible Controllers**
- N: Home
- P: 5m
- S: 3m
- M: 5m
- X: Custom
- R: Custom

**Cable Length**
- Option

**Splash-Proof Controllers**
- Used as standard

**Linear Servo Controllers**
- Used as standard

**Servo Motor**
- Used as standard

**Pulse Motor**
- Used as standard

**Rotary Type Controllers**
- Used as standard

**Gripper/ASEP PMEC ROBO SCON ACON PCON ERC2 PSEP SSEL ASEL XSEL PSEL**

**Cleanroom Type**
- ROBO Cylinder

**Robotic Type**
- High-Speed Slider Coupling Type

**80mm Width**

**Pulse motor**

**Steel Base**

**Options (Unit: mm/s)**
- The values enclosed in “< >” apply to vertical usage
- 0.5G (horizontal) and 0.3G (vertical) are the upper limits of the acceleration

**Series Type**
- Encoder
- Motor
- Lead
- Stroke Compatible Controllers
- Cable Length
- Option

**Cable List**
- Type
- Cable Symbol
- Standard Price

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

**Legend**
- Stroke
- Option Code
- See Page
- Standard Price

**Actuator Specifications**

### Lead and Load Capacity

**Model**
- RCP2CR-HS8C-I-86P-30-P2-30-3

<table>
<thead>
<tr>
<th>Stroke (mm)</th>
<th>Standard Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>50/100</td>
<td>~</td>
</tr>
<tr>
<td>100/200</td>
<td>~</td>
</tr>
<tr>
<td>250/300</td>
<td>~</td>
</tr>
<tr>
<td>350/400</td>
<td>~</td>
</tr>
<tr>
<td>450/500</td>
<td>~</td>
</tr>
<tr>
<td>550/600</td>
<td>~</td>
</tr>
<tr>
<td>650/700</td>
<td>~</td>
</tr>
<tr>
<td>750/800</td>
<td>~</td>
</tr>
<tr>
<td>850/900</td>
<td>~</td>
</tr>
<tr>
<td>950/1000</td>
<td>~</td>
</tr>
</tbody>
</table>

**Load**
- 50 – 1000 (50mm pitch increments)

**Max Load Capacity (Note 1)**
- Please note that the maximum load capacity decreases as the speed increases.

**Stroke List**

**Stroke (mm)**
- 30
- ~ 20
- ~ 3

**Suitable Length**
- Option Code

**Option List**

<table>
<thead>
<tr>
<th>Name</th>
<th>Option Code</th>
<th>Standard Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brake</td>
<td>B</td>
<td>~ A-20</td>
</tr>
<tr>
<td>Reversed-home</td>
<td>NM</td>
<td>~ A-33</td>
</tr>
<tr>
<td>Brake port on opposite side</td>
<td>VR</td>
<td>~ A-38</td>
</tr>
</tbody>
</table>

**Notes on Selection**
- Due to the large load of the ball screw in high-speed actuators, operating at low speeds may cause vibration and/or noise.

**Stroke and Maximum Speed**

<table>
<thead>
<tr>
<th>Stroke (mm)</th>
<th>Maximum Speed (mm/s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>~ 20</td>
<td>(*) Minimum Speed: 100mm/s</td>
</tr>
<tr>
<td>~ 3</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.

**Legend**
- Bob: Brake
- NM: Reversed-home
- M: Brake
- ROBO Cylinder
- High-Speed Slider
- Coupling Type
- 80mm Width
- Pulse motor

**Cables**

<table>
<thead>
<tr>
<th>Type</th>
<th>Cable Symbol</th>
<th>Standard Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>X06 (8m)</td>
<td>~</td>
</tr>
<tr>
<td></td>
<td>X10 (10m)</td>
<td>~</td>
</tr>
<tr>
<td></td>
<td>R04 (4m)</td>
<td>~</td>
</tr>
<tr>
<td></td>
<td>R05 (5m)</td>
<td>~</td>
</tr>
<tr>
<td></td>
<td>R06 (6m)</td>
<td>~</td>
</tr>
<tr>
<td></td>
<td>R10 (10m)</td>
<td>~</td>
</tr>
<tr>
<td></td>
<td>R11 (11m)</td>
<td>~</td>
</tr>
<tr>
<td></td>
<td>R15 (15m)</td>
<td>~</td>
</tr>
<tr>
<td></td>
<td>R20 (20m)</td>
<td>~</td>
</tr>
</tbody>
</table>

**Actuator Specifications**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drive System</td>
<td>Ball screw ø16mm ø10 grade</td>
</tr>
<tr>
<td>Rotational Repeatability</td>
<td>±0.02mm</td>
</tr>
<tr>
<td>+/- Motion</td>
<td>Minimum or less</td>
</tr>
<tr>
<td>Allowable Static Moment</td>
<td>Ma: 198.9N.m Mb: 198.9N.m Mc: 416.7N.m</td>
</tr>
<tr>
<td>Allowable Dynamic Moment(1)</td>
<td>Ma: 36.3N.m Mb: 36.3N.m Mc: 77.4N.m</td>
</tr>
<tr>
<td>Overhang Load Length</td>
<td>Ma: direction tension or less Mb: direction tension or less</td>
</tr>
<tr>
<td>Grease Type</td>
<td>Low dust generation grease (ball screw and guide)</td>
</tr>
<tr>
<td>Cleanliness</td>
<td>Class 10.9 (1.5µm)</td>
</tr>
<tr>
<td>Ambient Operating Temp/Humidity</td>
<td>40°C, 85% RH or less (non-condensing)</td>
</tr>
</tbody>
</table>

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Dimensions

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

Details of oblong hole

Dimensions of the Brake Section

The length L of a brake-equipped actuator is longer than that of a standard model (see the table by stroke) and 0.5kg to weight.

Compatible Controllers

The RCP2CR-HS8C series actuators can operate with the controllers below.

<table>
<thead>
<tr>
<th>Positioner Type</th>
<th>Model</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>PCON-CF-86PI-NP-2-0</td>
<td>PCON-CF-86PI-NP-2-0</td>
<td>512 points</td>
<td>DC24V</td>
<td>6A max.</td>
<td>6A max.</td>
<td>P525</td>
</tr>
</tbody>
</table>

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