RCP6(S)-WRA12R

**Model Specification Items**

<table>
<thead>
<tr>
<th>Series</th>
<th>Type</th>
<th>Encoder Type</th>
<th>Motor Type</th>
<th>Lead</th>
<th>Stroke</th>
<th>Applicable Controller/I/O Type</th>
<th>CABLE LENGTH</th>
<th>OPTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>RCP6: Separate Controller</td>
<td>ROBOCylinders</td>
<td>WA: Battery-less Absolute</td>
<td>20</td>
<td>20mm</td>
<td>50</td>
<td>(PCP6)</td>
<td>N: None</td>
<td>WA: Battery-less Absolute</td>
</tr>
<tr>
<td>RCP6: Built-in Controller</td>
<td>ROBOCylinders</td>
<td>42P: Stepper Motor</td>
<td>20</td>
<td>12mm</td>
<td>500</td>
<td>(PCP6)</td>
<td>N: None</td>
<td>WA: Battery-less Absolute</td>
</tr>
</tbody>
</table>

* RCP6 does not include a controller. RCP6S includes a built-in controller.
* Please refer to P.12 for more information about the model specification items.

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**Actuator Specifications**

### Lead and Payload

(1) The payload assumes that there is an external guide.
(2) The actuator specification displays the payload's maximum value, but it will vary depending on the acceleration and speed.
(3) The actuator may be equipped with a built-in guide. Please refer to the graphs shown in P.127 and after for the allowable load mass.
(4) When performing push motion operation, please confirm the push force of each model by checking the "Correlation diagrams of push force and current limits" on P.113.
(5) Depending on the ambient operational temperature, duty control is necessary for the RCP6S (built-in controller type) with lead 3/6. Please refer to P.130 for more information.

#### RCP6(S)-WRA12R

- **Model Number**
  - RCP6(S)-WRA12R-RA-20P-20
  - RCP6(S)-WRA12R-RA-20P-12
  - RCP6(S)-WRA12R-RA-20P-6
  - RCP6(S)-WRA12R-RA-20P-3

- **Lead and Connected Controller**
  - Lead (mm): 20, 12, 6, 3
  - Connected Controller: High-output

- **Max. Payload**
  - Stroke: 50~500

- **Stroke**
  - Stroke (mm): 50, 100, 150, 200, 250

#### Stroke and Max. Speed

- **Stroke**
  - Stroke (mm): 50, 100, 150, 200, 250

- **Max. Payload**
  - Loaded: 7.5 KN

#### Options

- **Name**
  - Brake: B
  - Cable exit direction (Outside): CJ0
  - Flange: FL
  - Motor side-mounted to the left: ML
  - Motor side-mounted to the right: MR
  - Non motor and specification: NM
  - T-slot nut bar (Left): NTLB
  - T-slot nut bar (Right): NTRB

- **Option Code**
  - See P.105
  - See P.106
  - See P.109
  - See P.110
  - See P.110

### Correlation Diagrams of Speed and Payload

High-output enabled with PCON/MCON/MSEL connected. RCP6(S)-WRA12R Horizontal mount

- **Lead 3**
  - Payload (kg): 20
  - Speed (mm/s): 200

### Actuator Specifications

#### Cable Length

- **Cable Type**
  - Standard: P (10m)
  - M (10m)

- **Specified Length**
  - X06 (6m) ~ X10 (10m)
  - X11 (11m) ~ X15 (15m)
  - X16 (16m) ~ X20 (20m)

- **Robot Cable**
  - RO1 (1m) ~ RO3 (3m)
  - RO4 (4m) ~ RO6 (6m)
  - R11 (11m) ~ R15 (15m)
  - R16 (16m) ~ R20 (20m)

* Please refer to P.144 for more information regarding the maintenance cables.
The RCP6 series actuators can be operated by the controllers indicated below. Please select the type depending on your intended use. * Please refer to P.147 for more information about the built-in controller of RCP6S series.

### Applicable Controllers

<table>
<thead>
<tr>
<th>Name</th>
<th>External catalog</th>
<th>Input power</th>
<th>Positioner</th>
<th>Pulse train</th>
<th>Program</th>
<th>Network</th>
<th>Reference page</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCON-CB/CGB</td>
<td>1</td>
<td>DC24V</td>
<td>*Option</td>
<td>*Option</td>
<td>-</td>
<td>-</td>
<td>Please see P.131</td>
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<tr>
<td>MCON-C/CG</td>
<td>4</td>
<td>50-100-150V</td>
<td></td>
<td></td>
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<td>Please see the MCON catalog.</td>
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<tr>
<td>MSEL-PC/PG</td>
<td>4</td>
<td>Single-phase 100-230VAC</td>
<td>-</td>
<td>-</td>
<td>*</td>
<td>30,000</td>
<td>Please see the MSEL-PC/PG catalog.</td>
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</tbody>
</table>

*Please select “high-output specification” as an option for the MCON. With the MCON, operation is possible only when the high-output specification is selected.

### Dimensions and Mass 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>
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<tbody>
<tr>
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<td>305</td>
<td>355</td>
<td>405</td>
<td>455</td>
<td>505</td>
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<td>6</td>
<td>9</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

| Allowable static load on rod tip (N) | 294 | 294 | 294 | 294 | 294 | 294 | 294 | 294 | 294 | 294 |
| Allowable static torque on rod tip (N•m) | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  |
| RCP6 w/ or w/o brake  | 5.1 | 5.7 | 6.3 | 7.0 | 7.6 | 8.2 | 8.9 | 9.5 | 10.2 | 10.8 |
| RCP6(S)-WRA12R w/ or w/o brake | 5.1 | 5.7 | 6.3 | 7.0 | 7.6 | 8.2 | 8.9 | 9.5 | 10.2 | 10.8 |

*1 When the rod is returning to its home position, please be careful of interference from surrounding objects, as it will travel until it reaches the M.E. (M.E. Mechanical end, S.E. Stroke end)

**Note:**
- The type of compatible networks will vary depending on the controller. Please refer to reference page for more information.
- The /f_igure above is the motor side-mounted to the left (ML).