**RCP6(S)-WRA10R**

**Model Specification Items**

- **Series**
  - RCP6: Separate Controller
  - RCPS: Built-in Controller
- **Type**
  - WA: Battery-less Absolute
  - 35P: Stepper Motor 352°C Size
- **Encoder Type**
  - 16: High-output
  - 5: High-output
  - 10: High-output
- **Motor Type**
  - 35P: Stepper Motor
- **Applicable Controller/I/O Type**
  - (RCP6), P: None, S: 3m, M: 5m
  - (MSEL), SE: SO Type
- **Cable Length**
  - N: None
- **Options**
  - P: 1m
  - S: 3m
  - M: 5m
  - X122: Specified Length
  - RC22: Robot Cable

**Legend:**
- **Motor side-mounted to the right**
- **FL**
- **Motor side-mounted to the left**
- **ML**
- **Non-motor end specification**
- **NM**
- **Side-mounted T-slot nut bar (Right)**
- **NTBL**
- **Side-mounted T-slot nut bar (Left)**
- **NTLR**
- **Cable exit direction (Outside)**
- **CJO**
- **Brake**
- **X**
- **Flange**
- **FL**
- **X**
- **Motor side-mounted to the left**
- **ML**
- **X**
- **Motor side-mounted to the right**
- **MR**
- **X**
- **Non-motor and specification**
- **NM**
- **X**
- **NT slot nut bar (Left)**
- **NTL**
- **X**
- **NT slot nut bar (Right)**
- **NT**
- **X**

**Actuator Specifications**

**Lead and Payload**

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Lead (mm)</th>
<th>Connected Controller</th>
<th>Max. Payload (Horizontal/Vertical kg)</th>
<th>Stroke (mm)</th>
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</thead>
<tbody>
<tr>
<td>RCP6(S)-WRA10R-WA-35P-16</td>
<td>16</td>
<td>High-output Enabled</td>
<td>4 -</td>
<td>50~500 (The increment of stroke is 50mm)</td>
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<td>11.5 -</td>
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<td>RCP6(S)-WRA10R-WA-35P-5</td>
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<td>28 5</td>
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<td>RCP6(S)-WRA10R-WA-35P-2.5</td>
<td>2.5</td>
<td>High-output Enabled</td>
<td>40 10</td>
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**Cable Length**

- **Cable Type**
  - Standard: P (1m), S (3m), M (5m)
- **Specified Length**
  - 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)

**Actuator Specifications**

- **Drive system**
  - Ball screw 48mm, rolled C10
- **Positioning repeatability**
  - ±0.01mm
- **Lost motion**
  - 0.1mm or less
- **Rod**
  - 625mm Stainless steel
- **Rod non-rotation precision**
  - 0 deg
- **Allowable load and torque on rod tip**
  - See P. 127
- **Rod tip overhang distance**
  - 100mm
- **Ambient operating temp. & humidity**
  - 0~40°C, 85% RH or less (Non-condensing)
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.

### 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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<tr>
<td>L</td>
<td>252.5</td>
<td>302.5</td>
<td>352.5</td>
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</tbody>
</table>

### Rod Deflection of RCP6(S)-WRA10R (Reference Values)

- **Deflection (mm)**
  - 50mm stroke: 1.5
  - 100mm stroke: 3.0
  - 150mm stroke: 4.5
  - 200mm stroke: 6.0
  - 250mm stroke: 7.5
  - 300mm stroke: 9.0
  - 350mm stroke: 10.5
  - 400mm stroke: 12.0
  - 450mm stroke: 13.5
  - 500mm stroke: 15.0

- **Load on rod tip (N)**
  - 50mm stroke: 150
  - 100mm stroke: 200
  - 150mm stroke: 250
  - 200mm stroke: 300
  - 250mm stroke: 350
  - 300mm stroke: 400
  - 350mm stroke: 450
  - 400mm stroke: 500
  - 450mm stroke: 550
  - 500mm stroke: 600

### Applicable Controllers

<table>
<thead>
<tr>
<th>Name</th>
<th>External view</th>
<th>Terminal</th>
<th>Input power</th>
<th>Positioner</th>
<th>Pulse train</th>
<th>Program</th>
<th>Network</th>
<th>*Option</th>
<th>Reference page</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCON-CB/CG</td>
<td>1</td>
<td>1 DC24V</td>
<td>5</td>
<td>*Option</td>
<td>*Option</td>
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<td>Please see P.131</td>
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<td>MCON-C/CG</td>
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<td>-</td>
<td>5</td>
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<td>512</td>
<td>768</td>
<td>Please see the MCON catalog.</td>
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<tr>
<td>MSEL-PC/PG</td>
<td>4</td>
<td>4 Single-phase 100~230VAC</td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>30,000</td>
<td>68 for network spec.</td>
<td>Please see MSEL-PC/PG catalog.</td>
</tr>
</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.