## Actuator Specifications

### Lead and Load Capacity

<table>
<thead>
<tr>
<th>Model</th>
<th>Bal Screw</th>
<th>Lead</th>
<th>Stroke</th>
<th>Max. Load Capacity (kg)</th>
<th>Net</th>
<th>Repeatability (mm)</th>
<th>Speed (mm/s)</th>
<th>Max. Speed (mm/s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RCP3-TA4C-I-28P-6-</td>
<td>1-7-3-4</td>
<td>6</td>
<td>~1</td>
<td>~0.5</td>
<td>15</td>
<td>±0.02</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>RCP3-TA4C-I-28P-4-</td>
<td>1-7-3-4</td>
<td>4</td>
<td>~2</td>
<td>~1</td>
<td>22</td>
<td></td>
<td>4</td>
<td>200</td>
</tr>
<tr>
<td>RCP3-TA4C-I-28P-2-</td>
<td>1-7-3-4</td>
<td>2</td>
<td>~3</td>
<td>~1.5</td>
<td>44</td>
<td></td>
<td>2</td>
<td>100</td>
</tr>
</tbody>
</table>

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

### Stroke and Maximum Speed

<table>
<thead>
<tr>
<th>Model</th>
<th>Bal Screw</th>
<th>Stroke</th>
<th>Max. Speed (mm/s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RCP3-TA4C-I-28P-6-</td>
<td>1-7-3-4</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>RCP3-TA4C-I-28P-4-</td>
<td>1-7-3-4</td>
<td>4</td>
<td>200</td>
</tr>
<tr>
<td>RCP3-TA4C-I-28P-2-</td>
<td>1-7-3-4</td>
<td>2</td>
<td>100</td>
</tr>
</tbody>
</table>

*(Unit: mm/s)*

### Cable List

<table>
<thead>
<tr>
<th>Cable Symbol</th>
<th>Type</th>
<th>Standard Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>Robot Cables</td>
<td>-</td>
</tr>
<tr>
<td>N</td>
<td>None</td>
<td>-</td>
</tr>
<tr>
<td>X</td>
<td>5m</td>
<td>-</td>
</tr>
<tr>
<td>X</td>
<td>10m</td>
<td>-</td>
</tr>
<tr>
<td>X</td>
<td>15m</td>
<td>-</td>
</tr>
<tr>
<td>X</td>
<td>20m</td>
<td>-</td>
</tr>
</tbody>
</table>

*(Note 2) See page A-66 for pushing force graphs.*

*(Note 3) See page A-39 for cables for maintenance.*

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**Actuator Types**

- **RCP3** ROBO Cylinder
- **RCP3-M** Mini Table Type
- **RCP3-M** Motor Unit Coupled
- **40mm** Width
- **Pulse Motor**
- **Ball Screw**

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### RCP3-TA4C

#### Configuration

<table>
<thead>
<tr>
<th>Configuration</th>
<th>RCP3-TA4C</th>
<th>Encoder</th>
<th>Type</th>
<th>28P</th>
<th>Lead</th>
<th>Stroke</th>
<th>Compatiable Controller</th>
<th>Cable Length</th>
<th>Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>Series</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Options</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

*(Note 1) The load capacity is based on operation at an acceleration of 0.3G (0.2G for the 2mm-lead model, or when used vertically). 0.3G (0.2G for 2mm lead) is the upper limit of the acceleration.*

### Technical References

- **P. A-5**

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**Legend**

- **I** Incremental
- **A** Absolute
- **H** Horizontal
- **V** Vertical
- **N** None
- **P** Pulse
- **M** Motor
- **E** Encoder
- **C** Cables
- **B** Ball Screw
- **S** Screw

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**Actuator Specifications**

- **Drive System**
  - Ball screw ø6mm C10 grade
- **Cable List**
  - ø6mm (Robot Cables) C10 grade
- **Material**
  - Aluminum (white alumite treated)
- **Allowable Dynamic Moment**
  - Max: 4.2 Nm
  - Mfc: 6 Nm
  - Mfc: 8.2 Nm
- **Allowable Operating Temperature/Humidity**
  - Ambient (Operating Temp./Humidity 0 ~ 40°C, 85% RH or less (non-condensing))

### Options

- **Reversed-home**
- **N** None
- **M** Motor
- **E** Encoder
- **C** Cables
- **B** Ball Screw
- **S** Screw

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**RCP3-TA4C**

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**Electromate**

- **Toll Free Phone** (877) SERVO98
- **Toll Free Fax** (877) SERVO99
- [www.electromate.com](http://www.electromate.com)
- sales@electromate.com

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**Sold & Serviced By:**

- Controllers
- Splash Proof
- WM
- Cleanroom
- Gripper/ Rotary Type
- Linear Servo Type
- Encoders
- SCR
- Pulse Motor
- Servo Motor (24V)
- Servo Motor (200W)
- Linear Servo Motor

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**Units**

- **Linear Servo Type**
  - [mm]
  - [mm/s]
  - [Nm]
  - [N]
**Dimensions/Weight by Stroke**

*1 When homing, the slider moves to the mechanical end; therefore, please watch for any interference with the surrounding objects.

ST: Stroke
ME: Mechanical end
SE: Stroke end

- **Dimensions:**
  - Motor-encoder cable connector
  - Change cable outlet direction (optional)

- **Weight (kg):**
  - 0.7

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**Compatible Controllers**

The RCP3 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-28PI-MP-2-0</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>
</tr>
<tr>
<td></td>
<td>PSEP-C-28PI-MP-2-0</td>
<td>Operate with same signal as solenoid valve. Supports both single and brake-solenoid types.</td>
<td>3 points</td>
<td>AC100V</td>
<td>See P461</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>PSEP-C-28PI-MP-2-0</td>
<td>Operate with same signal as solenoid valve. Supports both single and brake-solenoid types.</td>
<td>3 points</td>
<td>AC100V</td>
<td>See P461</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Splash-Proof</td>
<td>PSEP-C-28PI-MP-2-0</td>
<td>Operate with same signal as solenoid valve. Supports both single and brake-solenoid types.</td>
<td>3 points</td>
<td>AC100V</td>
<td>See P461</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Positioner Type</td>
<td>PCON-C-28PI-MP-2-0</td>
<td>Positioning is possible for up to 512 points</td>
<td>512 points</td>
<td>AC100V</td>
<td>See P461</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Safety-Compliant</td>
<td>PCON-C-28PI-MP-2-0</td>
<td>Positioning is possible for up to 512 points</td>
<td>512 points</td>
<td>AC100V</td>
<td>See P461</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Pulse Train Input Type</td>
<td>PCON-P-28PI-MP-2-0</td>
<td>Pulse train input type with differential line driver support</td>
<td>24 points</td>
<td>DC34V</td>
<td>24 max.</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>PCON-P-28PI-MP-2-0</td>
<td>Pulse train input type with differential line driver support</td>
<td>24 points</td>
<td>DC34V</td>
<td>24 max.</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Pulse Train Input Type</td>
<td>PCON-P-28PI-MP-2-0</td>
<td>Pulse train input type with differential line driver support</td>
<td>24 points</td>
<td>DC34V</td>
<td>24 max.</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Serial Communication Type</td>
<td>PCON-S-28PI-MP-2-0</td>
<td>Dedicated to serial communication</td>
<td>56 points</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Field Network Type</td>
<td>IRCON-28PI</td>
<td>Dedicated to field network</td>
<td>768 points</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Program-Control Type</td>
<td>PSEL-C-1-28PI-MP-2-0</td>
<td>Programmed operation is possible</td>
<td>1506 points</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

*1 This is for the single-axis PSEL.*

*2 This is for the single-axis PSEL.*

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**RCP3-TA4C**

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