

# RCP2-RMGS

ROBO Cylinder Rod Type: Unit Width 64mm, Pulse Motor, w/ Single Guide



Type Rod (64mm wide), w/ Single Guide Stroke 50~300mm Load capacity 5kg (horizontal)/24kg (vertical)

Model Specification Items Series Type Encoder type Motor Lead Stroke Applicable controller Cable length Options  
 (Example) RCP2 -RMGS- I - PM - 8 - 300 - P1 - S - FT

\* Refer to page 37 for the details of the model specification items.

\* The maximum speed limit of the RCP2 Series will vary according to the weight of the load on the slider (rod). Refer to Correlation Diagrams of Speed and Load Capacity on page 31.

**Model/Specifications**

| Model                        | Encoder type         | Motor       | Lead (mm) | Stroke 50mm increments (mm) | Speed (mm/s)   | Load capacity (Note 2) |               | Maximum push force (N) |
|------------------------------|----------------------|-------------|-----------|-----------------------------|----------------|------------------------|---------------|------------------------|
|                              |                      |             |           |                             |                | Horizontal (kg)        | Vertical (kg) |                        |
| RCP2-RMGS-○-PM-16-***-P1-△-□ | Absolute Incremental | Pulse motor | 16        | 50 ~ 300                    | 10 ~ 450 (400) | 3 ~ 1                  | 4 ~ 0.5       | 240                    |
| RCP2-RMGS-○-PM-8-***-P1-△-□  |                      |             | 8         |                             | 5 ~ 210        | 4 ~ 1.5                | 16 ~ 1        | 470                    |
| RCP2-RMGS-○-PM-4-***-P1-△-□  |                      |             | 4         |                             | 1 ~ 133        | 5 ~ 2                  | 24 ~ 0.5      | 800                    |

\* In the above model names, ○ indicates the encoder type, \*\*\* the stroke, △ the cable length, and □ the applicable options.

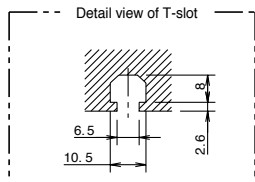
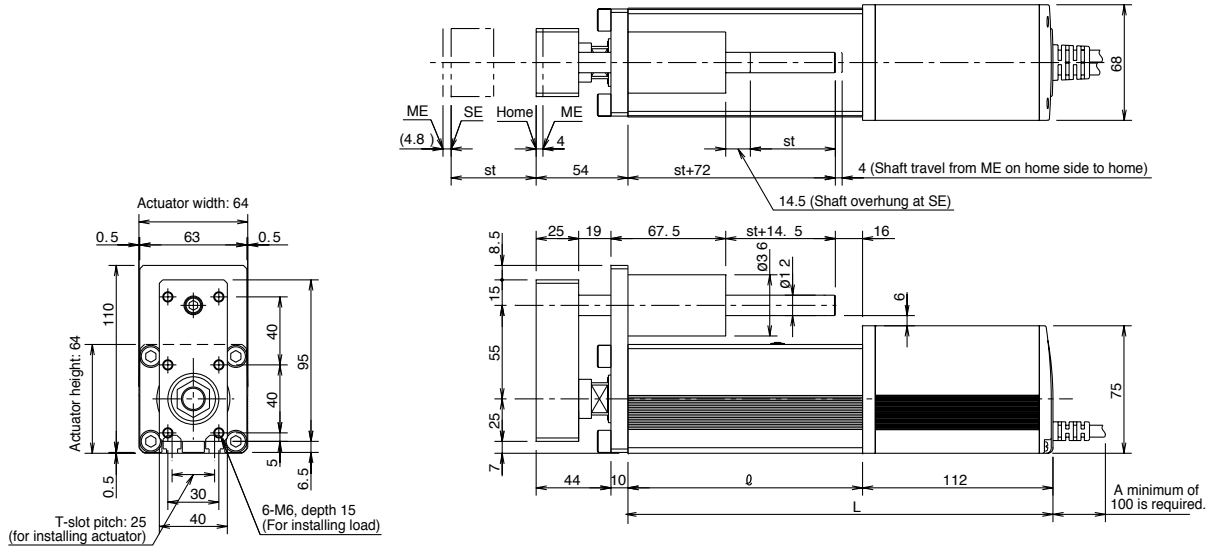
**Options**

| Name              | Model | Page  |
|-------------------|-------|-------|
| Brake             | B     | →P137 |
| With foot bracket | FT    | →P139 |

**Common Specifications**

|                           |   |
|---------------------------|---|
| Drive system              | Ball screw $\phi$ 12mm, rolled C10  |
| Positioning repeatability | $\pm$ 0.02mm  |
| Backlash                  | 0.05mm or less  |
| Guide                     | Single guide (guide rod diameter $\phi$ 12mm, ball bush type)                 |
| Rod diameter              | $\phi$ 30mm   |
| Rod non-rotative accuracy | $\pm$ 0.05°   |
| Base                      | Material: Aluminum with white alumite treatment                               |
| Cable length (Note 3)     | N: No cable, P: 1m, S: 3m, M: 5m, X□□: Length specification, R□□: Robot cable |

**Dimensions**



**Dimensions, Weight and Maximum Speed by Stroke**

\* The figures in parentheses apply to the brake type, while those in < > apply to a vertical application.

| Stroke               | 50          | 100         | 150         | 200         | 250         | 300         |
|----------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| $l$                  | 138         | 188         | 238         | 288         | 338         | 388         |
| L                    | 250 (322.5) | 300 (372.5) | 350 (422.5) | 400 (472.5) | 450 (522.5) | 500 (572.5) |
| Weight (kg)          | 3.6         | 4.4         | 5.0         | 5.5         | 6.1         | 6.6         |
| Maximum speed (mm/s) | 450 <400>   |             |             |             |             |             |
|                      | Lead 16     |             |             |             |             |             |
|                      | Lead 8      |             |             |             |             |             |
| Lead 4               |             |             |             |             |             |             |

**Applicable Controller Specifications**

| Applicable Controller | Maximum number of controlled axes | Compatible encoder type | Program operation | Positioner operation | Pulse-train control | Power-supply voltage | Page  |
|-----------------------|-----------------------------------|-------------------------|-------------------|----------------------|---------------------|----------------------|-------|
| RCP2-C                | 1 axis                            | Absolute                | X                 | O                    | X                   | 24VDC                | →P151 |
| RCP2-CG               | 1 axis                            | Incremental             | X                 | O                    | X                   |                      | →P151 |

**Caution**

(Note 1) The figures in ( ) apply to a vertical application.  
 (Note 2) The load capacity is based on operation at an acceleration of 0.2 G. The horizontal load capacity applies when the actuator is operated only by its guide. For the relationship of load capacity and life, refer to the diagrams of allowable tip load and traveling life on page 132.  
 (Note 3) The maximum cable length is 15 m for the absolute type and 20 m for the incremental type. Specify the desired length in meters (e.g., X08 = 8 m).

\* Refer to page 23 for other points to note.