

# RCP2-SA7

ROBO Cylinder Slider Type: Unit Width 73mm, Pulse Motor, Straight Shape



Type Slider (73mm wide) Stroke 100~800mm Load capacity 40kg (horizontal)/15kg (vertical)

Model Specification Items Series Type Encoder type Motor Lead Stroke Applicable controller Cable length Options  
 (Example) RCP2 - SA7 - I - PM - 8 - 800 - P1 - S - BE

\* 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 27.

### Model/Specifications

Model	Encoder type	Motor	Lead (mm)	Stroke 100mm increments (mm)	Speed (Note 1) (mm/s)	Load capacity (Note 2)	
						Horizontal (kg)	Vertical (kg)
RCP2-SA7-○-PM-16-***-P1-△-□	Absolute Incremental	Pulse motor	16	100~800	10~533	35~7	5~0.5
RCP2-SA7-○-PM-8-***-P1-△-□			8		5~266	40~10	10~1.5
RCP2-SA7-○-PM-4-***-P1-△-□			4		1~133	40	15~5

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

### Options

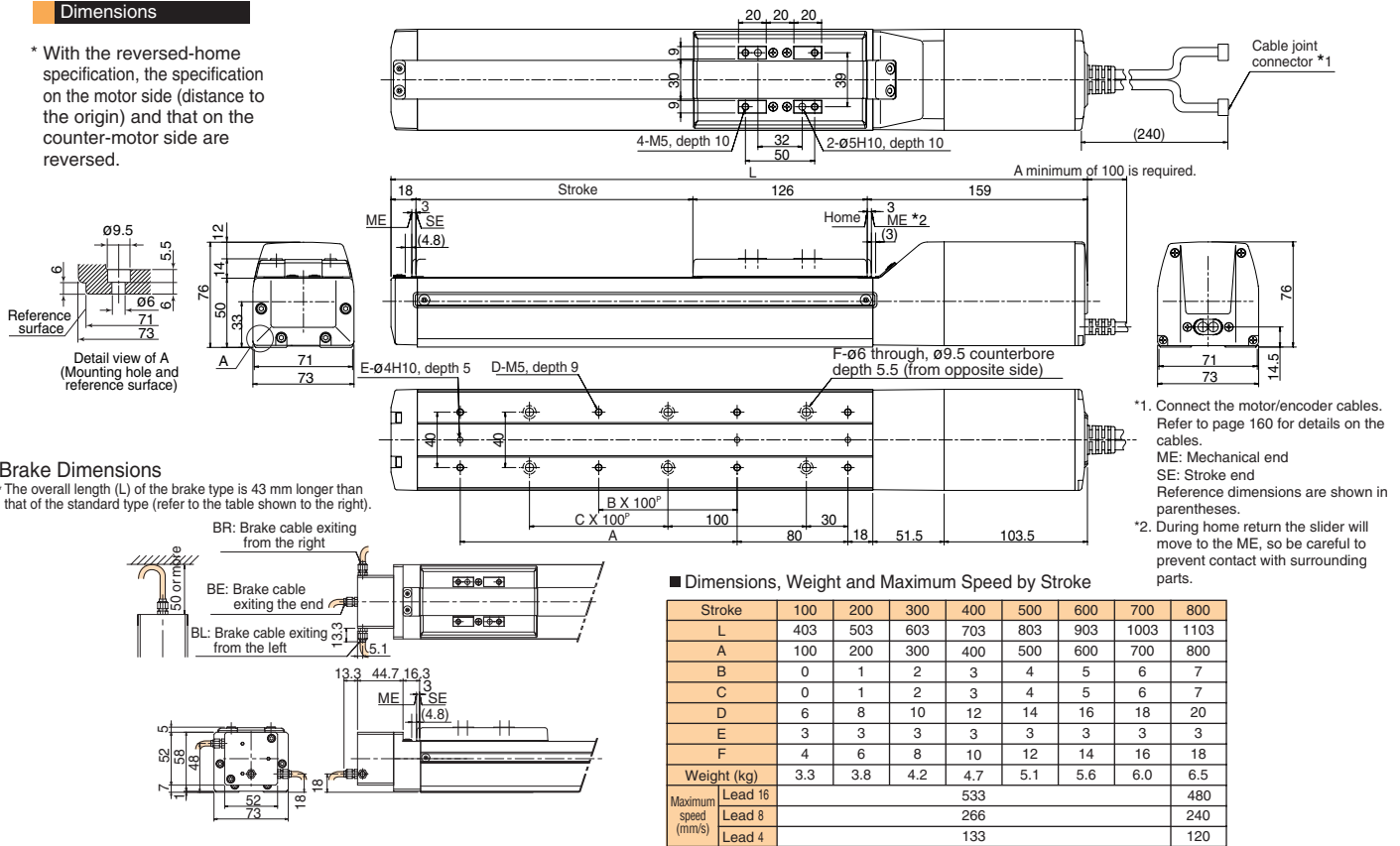
Name	Model	Page
Brake (Cable exiting the end)	BE	→P137
Brake (Cable exiting from the left)	BL	→P137
Brake (Cable exiting from the right)	BR	→P137
Reversed-origin specification	NM	→P137

### Common Specifications

Drive system	Ball screw $\phi$ 12mm, rolled C10
Positioning repeatability	$\pm$ 0.02mm
Backlash	0.1mm or less
Guide	Integrated with base
Allowable load moment	Ma: 13.9N·m Mb: 19.9N·m Mc: 38.3N·m
Overhung load length	Ma/Mb/Mc directions: 230mm or less
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

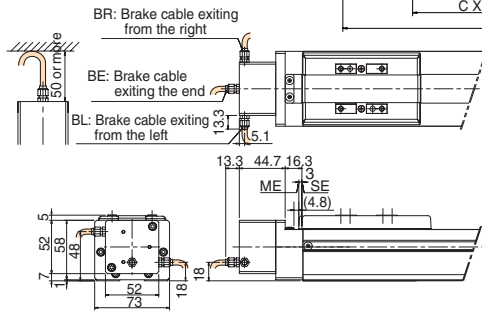
### Dimensions

\* With the reversed-home specification, the specification on the motor side (distance to the origin) and that on the counter-motor side are reversed.



### Brake Dimensions

\* The overall length (L) of the brake type is 43 mm longer than that of the standard type (refer to the table shown to the right).



### Dimensions, Weight and Maximum Speed by Stroke

Stroke	100	200	300	400	500	600	700	800	
L	403	503	603	703	803	903	1003	1103	
A	100	200	300	400	500	600	700	800	
B	0	1	2	3	4	5	6	7	
C	0	1	2	3	4	5	6	7	
D	6	8	10	12	14	16	18	20	
E	3	3	3	3	3	3	3	3	
F	4	6	8	10	12	14	16	18	
Weight (kg)	3.3	3.8	4.2	4.7	5.1	5.6	6.0	6.5	
Maximum speed (mm/s)	Lead 16	533							480
	Lead 8	266							240
	Lead 4	133							120

### 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 Incremental	X	O	X	24VDC	→P151
RCP2-CG	1 axis		X	O	X		→P151

**Caution**

(Note 1) A longer stroke will result in a lower maximum speed to prevent the ball screw from reaching a dangerous speed. (Refer to the above table for the maximum speed at a given stroke.)

(Note 2) The load capacity is based on operation at an acceleration of 0.3 G (or 0.2 G if the lead is 4 mm or in the case of a vertical application). 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).

(Note 3)

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