

RCP2-SM

ROBO Cylinder Slider Type with Iron Base: Unit Width 80mm, Pulse Motor, Straight Shape



Type / Slider (80mm wide) Stroke / 100~1000mm Load capacity / 55kg (horizontal)/20kg (vertical)

Model Specification Items Series Type Encoder type Motor Lead Stroke Applicable controller Cable length Options
 (Example) RCP2 - SM - I - PM - 10 - 1000 - P1 - S - B

* 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 50mm increments (mm)	Speed (mm/s)	Load capacity (Note 1)	
						Horizontal (kg)	Vertical (kg)
RCP2-SM-O-PM-20-***-P1-△-□	Absolute Incremental	Pulse motor	20	100~1000	10~666 <600>	40~10	5~0.5
RCP2-SM-O-PM-10-***-P1-△-□			10		5~333 <300>	50~4	12~2
RCP2-SM-O-PM-5-***-P1-△-□			5		1~165 <150>	55~10	20~0.5

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

Options

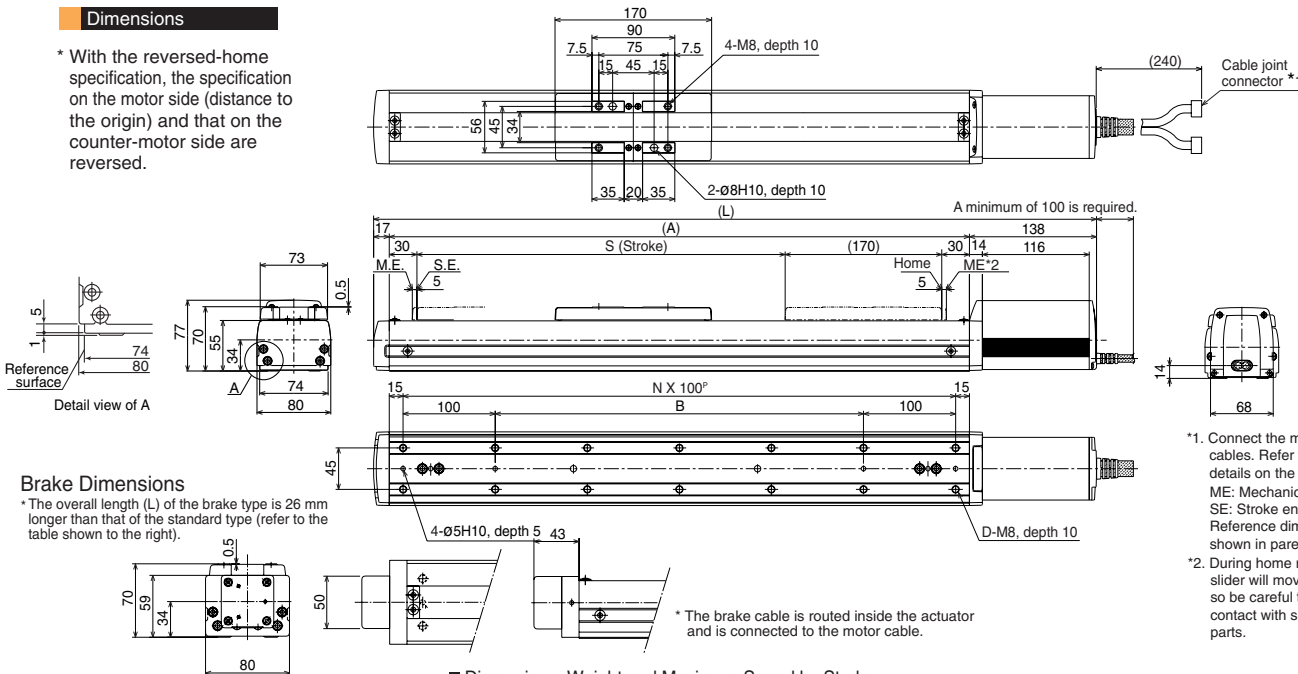
Name	Model	Page
Brake	B	→P137
Reversed-origin specification	NM	→P137

Common Specifications

Drive system	Ball screw ϕ 16mm, rolled C10
Positioning repeatability	\pm 0.02mm
Backlash	0.05mm or less
Guide	Integrated with base
Allowable load moment	Ma: 36.3N·m Mb: 36.3N·m Mc: 77.4N·m
Overhung load length	Ma/Mb/Mc directions: 450mm or less
Base	Material: Special alloy steel
Cable length (Note 3)	N: No cable, P: 1m, S: 3m, M: 5m, X□□: Length specification, R□□: Robot cable

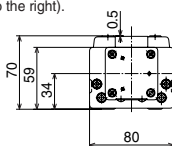
Dimensions

* 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 26 mm longer than that of the standard type (refer to the table shown to the right).



* The brake cable is routed inside the actuator and is connected to the motor cable.

1. Connect the motor/encoder cables. Refer to page 160 for details on the cables. ME: Mechanical end SE: Stroke end Reference dimensions are shown in parentheses.
2. During home return the slider will move to the ME, so be careful to prevent contact with surrounding parts.

Dimensions, Weight and Maximum Speed by Stroke

Stroke	100	200	300	400	500	600	700	800	900	1000	
L	485	585	685	785	885	985	1085	1185	1285	1385	
A	330	430	530	630	730	830	930	1030	1130	1230	
B	100	200	300	400	500	600	700	800	900	1000	
D	8	10	12	14	16	18	20	22	24	26	
N	3	4	5	6	7	8	9	10	11	12	
Weight (kg)	7.1	8.1	9.2	10.2	11.3	12.3	13.4	14.5	15.5	16.6	
Maximum speed (mm/s) (Note 1)	Lead 20	666 <600>						515		515	
	Lead 10	333 <300>						255		255	
	Lead 5	165 <150>						125		125	

* The brake cable is routed inside the actuator and is connected to the motor cable.

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



(Note 1) A longer stroke will result in a lower maximum speed to prevent the ball screw from reaching a dangerous speed. The figures in < > apply to a vertical application.
 (Note 2) The load capacity is based on operation at an acceleration of 0.3 G (or 0.2 G if the lead is 5 mm or in the case of a vertical application).
 (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.

ERC Actuators
 RCP2 Actuators
 RCS Actuators
 Information on Guide Types
 Actuator Options
 How to Install Actuator
 ERC Controllers
 RCP2 Controllers
 RCS Controllers