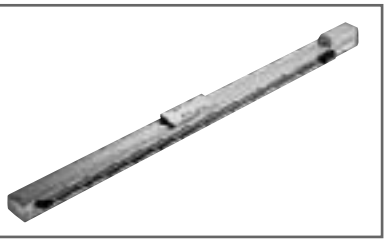
RCP2CR-SM

Clean Room Type ROBO Cylinder, Slider Type with Iron Base, Slider 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 output — Lead — Stroke — Applicable controller — Cable length — Option

(Example) : RCP2CR — SM□ — □ I□ — □ PM□ — □10□ — □1000□ — □ P1□ — □ S□ — □B

Models/Specifications

* The maximum speed of the RCP2 series will vary according to the weight of the load installed on the slider (or rod). Refer to the diagram on the back cover for the relationship of speed and load capacity.

Model	Encoder type	Motor type	Lead (mm)	Stroke 50mm increments (mm)	Speed (Note 1) (mm/s)	Load capacity (Note 2) Horizontal (kg)	Load capacity (Note 2) Vertical (kg)	Suction rate (N ℓ / min)
RCP2CR-SM-①-PM-20-②-P1-③-④	Absolute Incremental	Pulse motor	20	100 ~ 1000	10 ~666<500>	40 ~ 5	5 ~ 0.5	80
RCP2CR-SM-①-PM-10-②-P1-③-④			10		5 ~ 333<300>	50 ~ 4	12 ~ 0.5	40
RCP2CR-SM-①-PM-5-②-P1-③-④			5		1 ~ 165<150>	55 ~ 8	20 ~ 0.5	20

* In the above model names, ① indicates the encoder type, ② the stroke, ③ the cable length, and ④ the applicable options.

Options

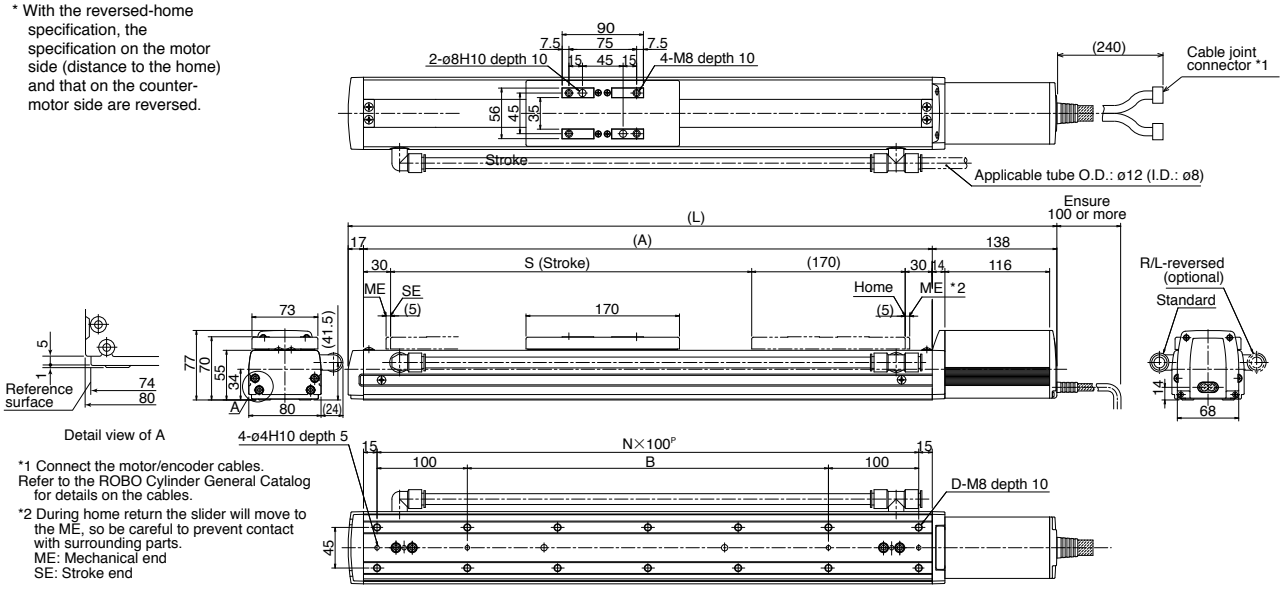
Name	Type	Reference Page
Brake	B	—
Reversed-home specification	NM	—
Suction-pipe joint R/L-reversed	VR	—

Common Specifications

Drive system	Ball screw ø16mm, rolled C10
Positioning repeatability	±0.02mm
Backlash	0.05mm or less
Guide	Integrated with base
Allowable load moment (Note 3)	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 4)	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 home) and that on the counter-motor side are reversed.



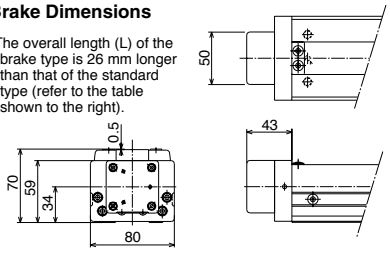
*1 Connect the motor/encoder cables. Refer to the ROBO Cylinder General Catalog for details on the cables.

*2 During home return the slider will move to the ME, so be careful to prevent contact with surrounding parts.
ME: Mechanical end
SE: Stroke end

Note
ME: Mechanical end

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 slider and is connected to the motor cable.

Dimensions, Weight and Maximum Speed by Stroke (Note 1)

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)	7.5	8.5	9.6	10.6	11.7	12.7	13.8	14.9	15.9	17.0
Maximum speed (mm/s) * Varies depending on the stroke. — Lead: 20	666<500>								625<500>	515<500>
Lead: 10	333<300>								310<300>	255
Lead: 5	165<150>								155<150>	125

Applicable Controller Specifications

Applicable controller	Maximum number of controlled axes	Compatible encoder type	Program Operation	Power supply voltage
RCP2-C	1 axis	Absolute Incremental	Positioner	DC24V
RCP2-CG	1 axis			

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.)The figures in < > apply to a vertical application.
(Note 2) Load capacity based on an acceleration of 0.3 G (or 0.2 G if the lead is 5 or in the case of a vertical application).
(Note 3) Based on a travel life of 10,000 km.
(Note 4) The maximum cable length is 15 m for the absolute type and 20 m for the incremental type. Specify the desired length in meters (ex. X08 = 8 m).