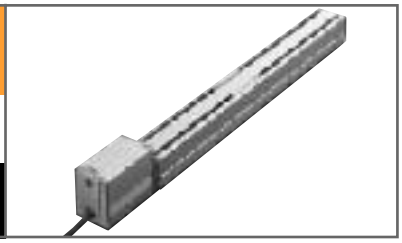
ERC-SA7

ROBO Cylinder Slider Type: Actuator Width 68mm, Pulse Motor, Straight Shape



Type: Slider (68mm wide) | Stroke: 50 ~ 600mm | Load capacity: 20kg (horizontal)/10kg (vertical)

Model Specification Items: Series – Type – Encoder type – Motor – Lead – Stroke – Cable length – Options

(Example) ERC – SA7 – I – PM – 16 – 600 – S – NM

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

Model/Specifications

*With the ERC series, the maximum speed will vary depending on the weight of the load placed on the slider (or rod). Refer to the diagrams on page 25 for the relationship of speed and load capacity.

Model	Encoder type	Motor	Lead (mm)	Stroke 50mm increments (mm)	Speed (Note 1) (mm/s)	Load capacity (Note 2) Horizontal (kg)	Load capacity (Note 2) Vertical (kg)	Maximum push force (N)
ERC-SA7-I-PM-16-✻✻✻-△-□	Incremental	Pulse motor	16	50 ~ 600	10 ~ 450 <400>	10~2	2.5~0.5	–
ERC-SA7-I-PM-8-✻✻✻-△-□			8		5 ~ 250	20~3.5	5~0.5	–
ERC-SA7-I-PM-4-✻✻✻-△-□			4		1 ~ 125	20	10~2	–

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

Options

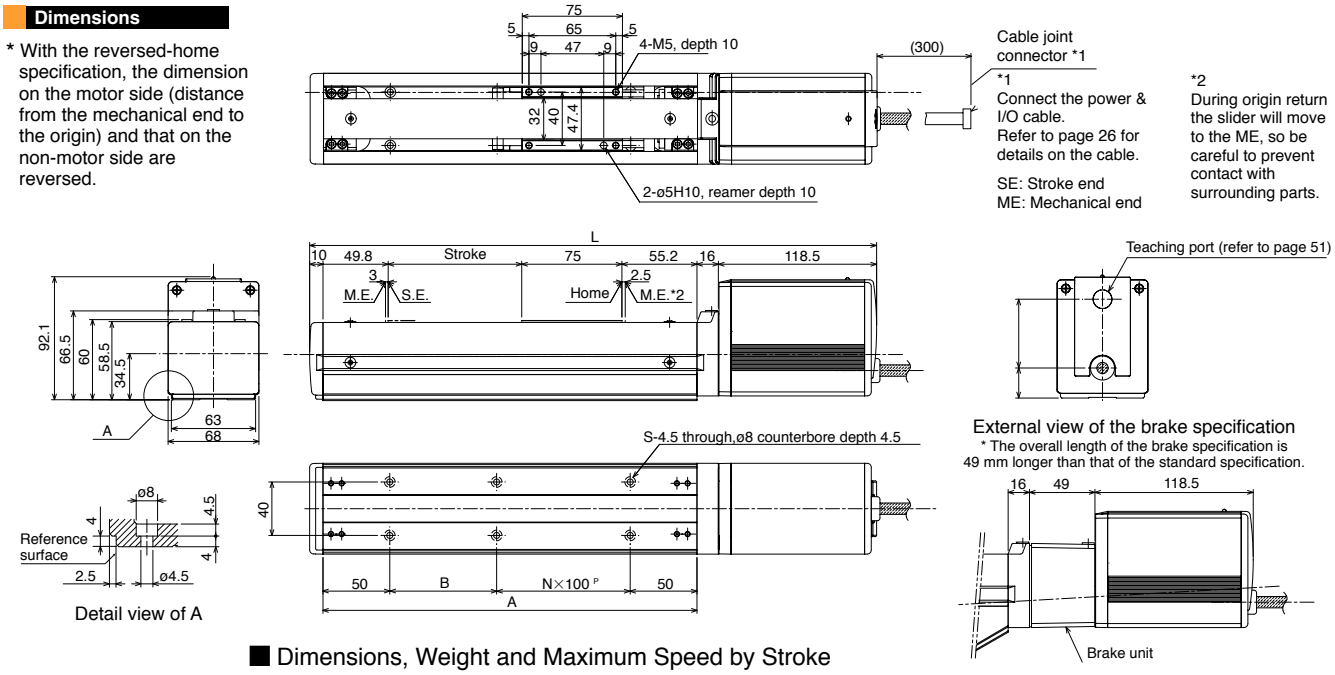
Name	Code	Page
Brake	B	→P137
Reversed-home specification	NM	→P137

Common Specifications

Drive system	Ball screw ø12mm, rolled C10
Positioning repeatability	±0.05mm
Backlash	0.1mm or less
Guide	Integrated with base
Allowable load moment	Ma : 13.8N • m Mb : 19.7N • m Mc : 29.0N • m
Overhung load length	Ma direction: 150mm or less, Mb/Mc directions: 150mm 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, W□□: Connectors on both ends

Dimensions

* With the reversed-home specification, the dimension on the motor side (distance from the mechanical end to the origin) and that on the non-motor side are reversed.



Dimensions, Weight and Maximum Speed by Stroke

Stroke	50	100	150	200	250	300	350	400	450	500	550	600
L	374.5	424.5	474.5	524.5	574.5	624.5	674.5	724.5	774.5	824.5	874.5	924.5
A	230	280	330	380	430	480	530	580	630	680	730	780
B	30	80	30	80	30	80	30	80	30	80	30	80
N	1	1	2	2	3	3	4	4	5	5	6	6
S	6	6	8	8	10	10	12	12	14	14	16	16
Weight (kg)	3.1	3.2	3.4	3.6	3.7	3.9	4.0	4.2	4.3	4.5	4.6	4.8
Maximum Speed (mm/s) Lead 16	450(400)											
Maximum Speed (mm/s) Lead 8	250											
Maximum Speed (mm/s) Lead 4	125											

Applicable Controller Specifications

Applicable Controller	Maximum number of controlled axes	Compatible encoder type	Program operation	Positioner operation	Pulse-train control	Power supply voltage	Page
Built-in	1 axis	Incremental	×	○	×	DC24V	→P144

Caution

(Note 1) The figures in < > apply to a vertical application.
(Note 2) The load capacity is based on operation at an acceleration of 0.3 G (or 0.2 G if the lead is 3 mm or in the case of a vertical application).
(Note 3) The maximum cable length is 10 m. Specify the desired length in meters (e.g., X08 = 8 m).

* Refer to page 23 for other points to note.