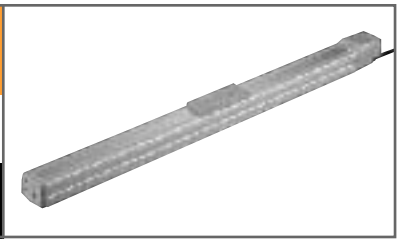
RCS-SA6

ROBO Cylinder Slider Type: Unit Width 58mm, 30W, Straight Shape

Type	Stroke	Load capacity
Slider (58mm wide)	50~600mm	12kg (horizontal)/6kg (vertical)



■ Model specification items — Series — Type — Encoder type — Motor — Speed type — Stroke — Cable length — Options

(Example) RCS - SA6 - A - 30 - H - 600 - S - BE

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

Model/Specifications

Model	Encoder type	Motor (W)	Lead (mm)	Stroke 50mm increments (mm)	Speed (mm/s) (Note 1)	Load capacity (Note 2)		Rated thrust (N)
						Horizontal (kg)	Vertical (kg)	
RCS-SA6-○-30-H- ★★★- △- □	Absolute Incremental	30	12	50~600	1~800	6	1.5	24.2
RCS-SA6-○-30-M- ★★★- △- □			6		1~400	12	3	48.4
RCS-SA6-○-30-L- ★★★- △- □			3		1~200	12	6	96.8

* 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-home specification	NM	→P137

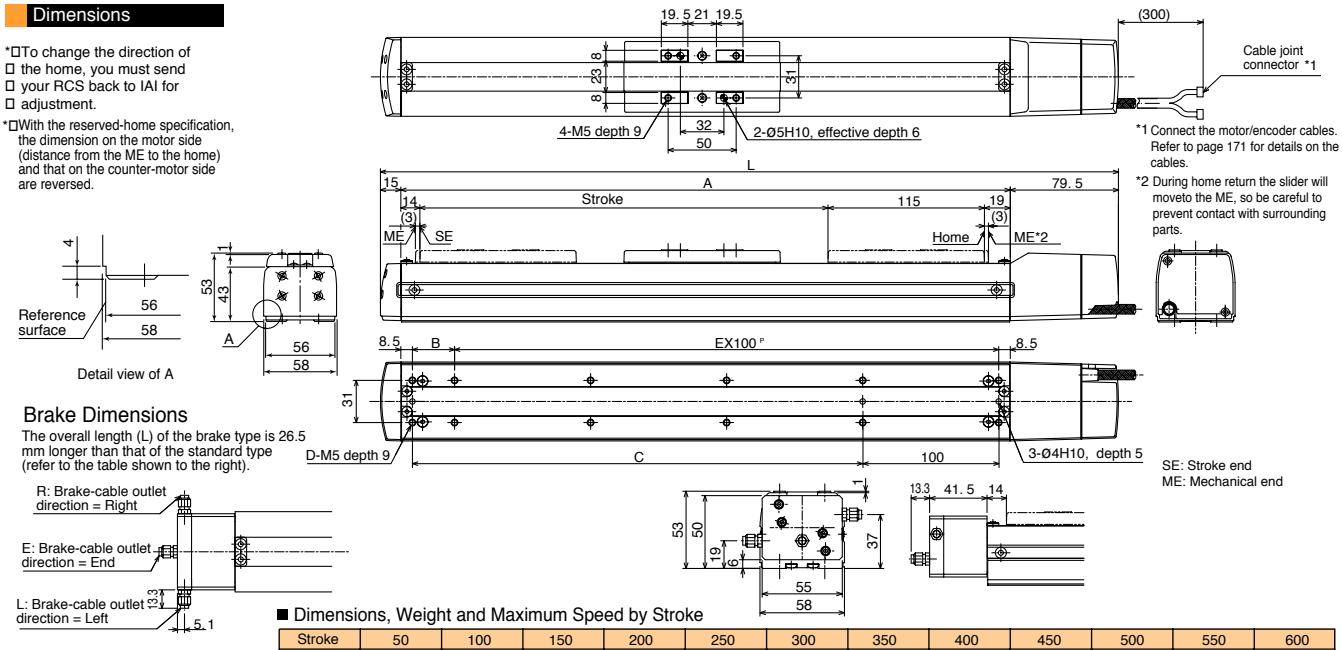
Common Specifications

Drive system	Ball screw Ø10mm, rolled C10
Positioning repeatability	±0.02mm
Backlash	0.1mm or less
Guide	Integrated with base
Allowable load moment	Ma: 8.9N・m Mb: 12.7N・m Mc: 18.6N・m
Overhung load length	Ma direction: 220mm or less, Mb/Mc directions: 220mm or less
Base	Material: Aluminum with white alumite treatment
Cable length (Note 3)	P: 1m, S: 3m, M: 5m, X□□: Length specification, R□□: Robot cable

Dimensions

*□To change the direction of □ the home, you must send □ your RCS back to IAI for □ adjustment.

*□With the reserved-home specification, the dimension on the motor side (distance from the ME to the home) and that on the counter-motor side are reversed.



*1 Connect the motor/encoder cables. Refer to page 171 for details on the cables.

*2 During home return the slider will moveto the ME, so be careful to prevent contact with surrounding parts.

Brake Dimensions

The overall length (L) of the brake type is 26.5 mm longer than that of the standard type (refer to the table shown to the right).

■ Dimensions, Weight and Maximum Speed by Stroke

Stroke	50	100	150	200	250	300	350	400	450	500	550	600
L	292.5	342.5	392.5	442.5	492.5	542.5	592.5	642.5	692.5	742.5	792.5	842.5
A	198	248	298	348	398	448	498	548	598	648	698	748
B	81	31	81	31	81	31	81	31	81	31	81	31
C	81	131	181	231	281	331	381	431	481	531	581	631
D	6	8	8	10	10	12	12	14	14	16	16	18
E	1	2	2	3	3	4	4	5	5	6	6	7
Weight (kg)	1.3	1.5	1.7	1.9	2.1	2.3	2.5	2.7	2.9	3.1	3.3	3.5
Maximum speed (mm/s) H type	800									760	640	540
Maximum speed (mm/s) M type	400									380	320	270
Maximum speed (mm/s) L type	200									190	160	135

Applicable Controller Specifications

Applicable Controller	Maximum number of controlled axes	Compatible encoder type	Program operation	Positioner operation	Pulse-train control	Power supply voltage	Page
RCS-C	1 axis	Absolute/ Incremental	X	O	X	24VDC	→P163
RCS-E	1 axis		X	O	X	24VDC	→P163

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 2.5 mm).

(Note 3) The maximum cable length is 15 m. Specify the desired length in meters (e.g., X08 = 8 m).

* Refer to page 23 for other points to note.