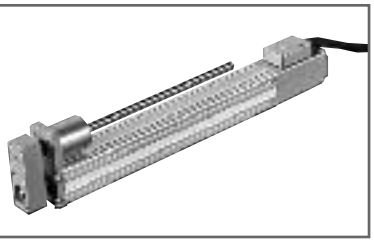
RCS-RA55-60-GS

ROBO Cylinder Rod Type: Unit Width 55mm, 60W, Slim Shape w/ Single Guide

Type: Rod (55mm wide) w/ single guide | Stroke: 50~300mm | Load capacity: 50kg (horizontal)/10.8kg (vertical)



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

(Example) RCS -RA55- A - 60 - GS1 - H - 300 - S - B

* 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-RA55-○-60-GS◎-H- ★★★-△-□	Absolute Incremental	60	16	50~300	1~800	12	1.3	63.8
RCS-RA55-○-60-GS◎-M- ★★★-△-□			8		1~400	25	4.3	127.5
RCS-RA55-○-60-GS◎-L- ★★★-△-□			4		1~200	50	10.8	255.1

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

Options

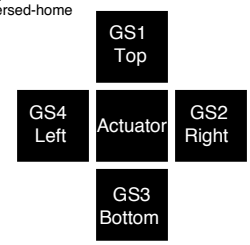
Name	Model	Page
Different connector-cable outlet direction	A2	→P137
Brake	B	→P137
With foot bracket	FT	→P139

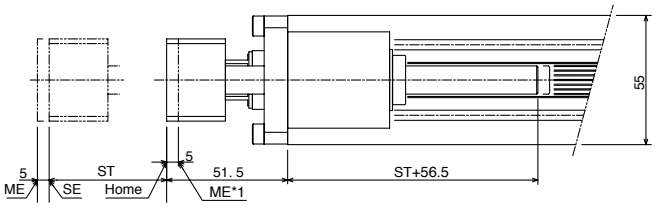
Common Specifications

Drive system	Ball screw ø12mm, rolled C10
Positioning repeatability	±0.02mm
Backlash	0.05mm or less
Guide	Ball bush guide x 1 (externally attached)
Rod diameter	ø25mm
Rod non-rotational accuracy	±0.1°
Base	Material: Aluminum with white alumite treatment
Cable length (Note 3)	P: 1m, S: 3m, M: 5m, X□□: Length specification, R□□: Robot cable

Dimensions

* Please note that due to its structure, the rod type is not available in the reversed-home specification.

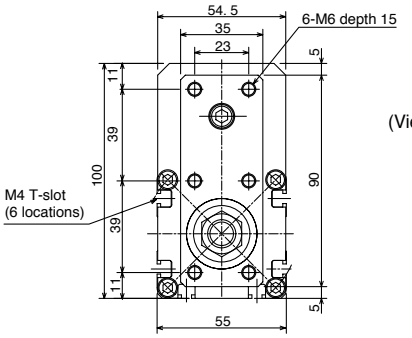




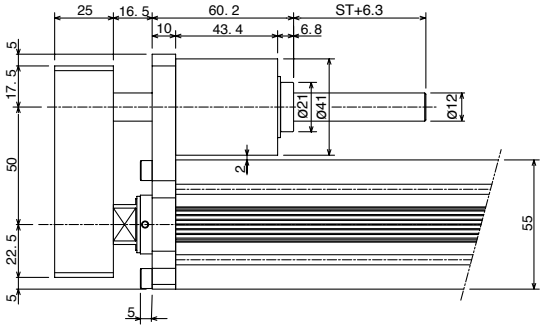
ST: Stroke
SE: Stroke end
ME: Mechanical end

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

Guide installation direction (View A)



(View A) →



* For the actuator dimensions, refer to the dimensions of the RCS-RA55-60-GN on page 100.

■ Dimensions, Weight and Maximum Speed by Stroke

Stroke		50	100	150	200	250	300
Weight (kg)		2.6	3.0	3.4	3.8	4.2	4.6
Maximum speed (mm/s)	H type	800					755
	M type	400					377
	L type	200					188

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	AC100/200V	→P163
E-Con	1 axis		X	O	X	AC100/200V	Refer to the separate catalog.
P-Driver	1 axis	Incremental	X	X	O	AC100/200V	
X-SEL	4 axes	Absolute/Incremental	O	△	X	AC100/200V	

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 for the L type). The horizontal load capacity assumes a condition where a guide or guides are used to prevent the rod from receiving radial loads. If no guide is used, refer to the correlation diagrams of allowable tip load and traveling life on page 132.
(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.