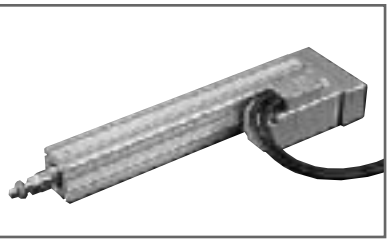
RCS-RA55R-60

ROBO Cylinder Rod Type: Unit Width 55mm, 60W, Slim Motor-Reversed Shape

Type: Rod (55mm wide) w/ motor-reversing | Stroke: 50~300mm | Load capacity: 50kg (horizontal)/11.5kg (vertical)



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

(Example) RCS - RA55R - A - 60 - GN - H - 300 - S - B

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

Model/Specifications

Model (Note 1)	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-RA55R-○-60-◎-H-★★★-△-□	Absolute Incremental	60	16	50~300	1~800	12	2	63.8
RCS-RA55R-○-60-◎-M-★★★-△-□			8		1~400	25	5	127.5
RCS-RA55R-○-60-◎-L-★★★-△-□			4		1~200	50	11.5	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 flange	FL	→P138
With foot bracket	FT	→P139
Inverse motor-reversing direction	R	→P137

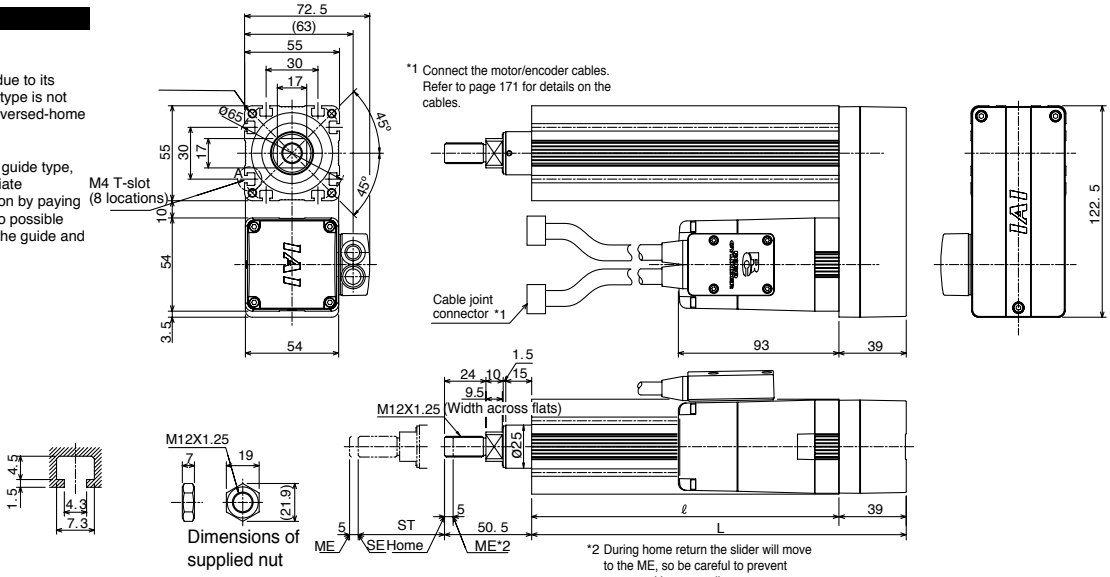
Common Specifications

Drive system	Ball screw ø12mm, rolled C10
Positioning repeatability	±0.02mm
Backlash	0.05mm or less
Guide	GN: No guide, GS1 to 4: Single guide, GD: Double guides
Rod diameter	ø25mm
Rod non-rotational accuracy	GN: ±0.7° GS: ±0.1° GD: ±0.08°
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.

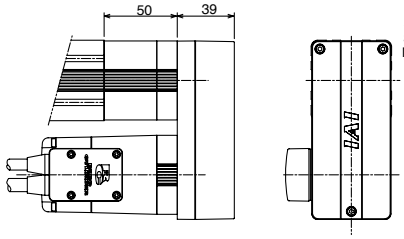
* If you are using a guide type, select an appropriate installation direction by paying careful attention to possible contact between the guide and motor.



ST: Stroke
SE: Stroke end
ME: Mechanical end

Brake Dimensions

The overall length (L) of the brake type is 50 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
ℓ		178	228	278	328	378	428
L		217	267	317	367	417	467
Weight (kg)		2.5	2.9	3.2	3.5	3.9	4.2
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 a rated 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.
(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.