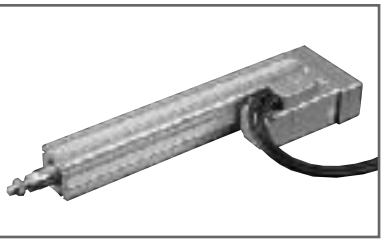
RCS-RA45R

ROBO Cylinder Rod Type: Unit Width 45mm, 30W, Slim Motor-Reversed Shape

Type	Stroke	Load capacity
Rod (45mm wide) w/ motor-reversing	50~200mm	30kg (horizontal)/8.5kg (vertical)



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

(Example) RCS - RA45R - A - 30 - GN - H - 200 - 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)	Load capacity (Note 1)		Rated thrust (N)
						Horizontal (kg)	Vertical (kg)	
RCS-RA45-○-30-◎-H-★★★-△-□	Absolute Incremental	30	10	50~200	1~500	7	1.5	51
RCS-RA45-○-30-◎-M-★★★-△-□			5		1~250	15	4	101.9
RCS-RA45-○-30-◎-L-★★★-△-□			2.5		1~125	30	8.5	202.9

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

Options

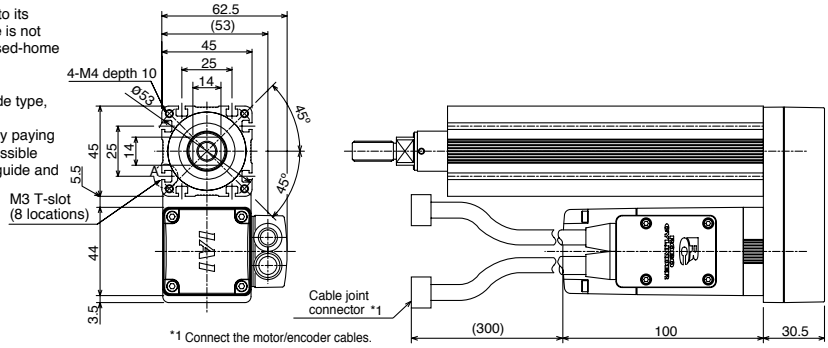
Name	Model	Page
Different connector-cable outlet direction	A2	→P137
Brake	B	→P137
With flange	FL	→P138
With foot bracket	FT	→P139
Inverse motor-reversing direction	R	→P137

Common Specifications

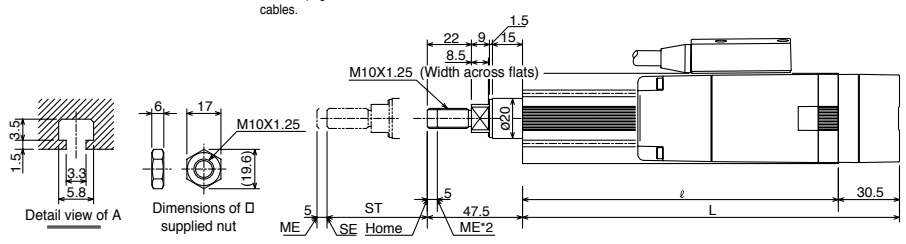
Drive system	Ball screw ø8mm, rolled C10
Positioning repeatability	±0.02mm
Backlash	0.05mm or less
Guide	GN: No guide, GS1 to 4: Single guide, GD: Double guides
Rod diameter	ø20mm
Rod non-rotational accuracy	GN: ±0.7° GS: ±0.1° GD: ±0.08°
Base	Material: Aluminum with white alumite treatment
Cable length (Note 2)	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.



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

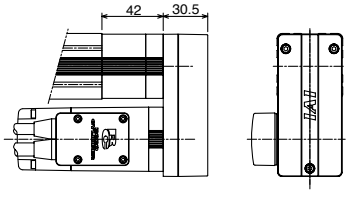


ST: Stroke
SE: Stroke end
ME: Mechanical end

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

Brake Dimensions

The overall length (L) of the brake type is 42 mm longer than that of the standard type (refer to the table shown below).



■Dimensions and Weight by Stroke

Stroke	50	100	150	200
ℓ	157.5	207.5	257.5	307.5
L	188	238	288	338
Weight (kg)	1.5	1.7	2.0	2.2

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) 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.
(Note 2) 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.