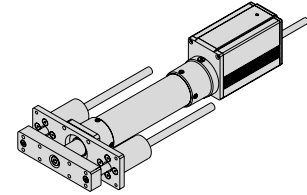


ERC-RA54GD

ROBO Cylinder, Rod Type, Flange Width 159mm, Pulse Motor, w/ Double Guide



Type Rod (58mm wide), w/ Double Guides Stroke 50 ~ 300mm Load capacity 40kg (horizontal)/18kg (vertical)

Model Specification Items Series - Type - Encoder type - Motor - Lead - Stroke - Cable length - Options
 (Example) ERC - RA54GD - I - PM - 6 - 300 - S - FT

* 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)		Maximum push force (N)
						Horizontal (kg)	Vertical (kg)	
ERC-RA54GD-I-PM-12-***-Δ-□	Incremental	Pulse motor	12	50 ~ 300	10 ~ 600	25~2.5	4.5~0.5	78
ERC-RA54GD-I-PM-6-***-Δ-□			6		5 ~ 300	40~12	12~2.5	157
ERC-RA54GD-I-PM-3-***-Δ-□			3		1 ~ 150	40	18~4	304

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

* Calculate the load capacity by subtracting the guide weight from the applicable weight found in "Dimensions, weight and Maximum Speed by Stroke" (the table shown below the figures).

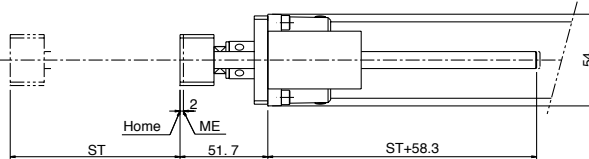
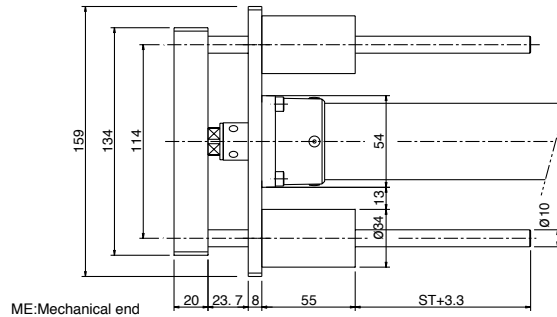
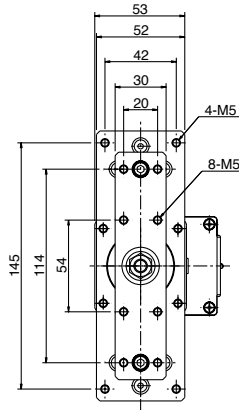
Options

Name	Code	Page
Foot bracket	FT	→P139

Common Specifications

Drive system □	Ball screw ø10mm, rolled C10
Positioning repeatability □	±0.0.5mm □
Backlash □	0.1mm or less
Guide □	Double guides (guide rod diameter ø10mm, ball bush type)
Rod diameter □	ø22mm dedicated SUS pipe
Rod non-rotation accuracy □	±0.0.5°
Actuator □ □	Pipe (ø45 SUS), flange (aluminum die-cast), motor cover (extruded aluminum)
Cable length (Note 3) □	N: No cable, P: 1m, S: 3m, M: 5m, X□□: Length specification, W□□: Connectors on both ends

Dimensions



Dimensions, Weight and Maximum Speed by Stroke

Stroke	50	100	150	200	250	300
Guide weight (kg)	0.4	0.4	0.5	0.6	0.6	0.7
Guide □ + Actuator weight (kg)	2.0	2.1	2.3	2.6	2.7	2.9
Maximum Speed (mm/s)	Lead 12		600		500	
	Lead 6		300		250	
	Lead 3		150		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



(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 3 mm or in the case of a vertical application). To use the actuator alone, refer to the diagrams of allowable tip load and traveling life on page 133.

(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.