EC-GS4

Mini | Rod Type | Single Guide | Motor Unit Type | Side-mounted Motor | Body Width 55 mm | 24v Stepper Motor

■ Model Specification Items

EC — GS4 — [Lead] — [Stroke] — [Cable Length] — ([Options])

Series	Type	Lead	Stroke	Cable Length	Options
EC	GS4	H : 6mm M : 4mm L : 2mm	30:30mm 50:50mm	0: With terminal block type connector 1: 1m ~ 10:10m	Refer to Options below.

* Please refer to P.16 for more information about the model specification items.

CE RoHS

Horizontal | Vertical | Side | Ceiling

* Depending on the model, there may be some limitations to using the vertical, side, and ceiling mount positions. Please contact IAI for more information regarding mounting positions.

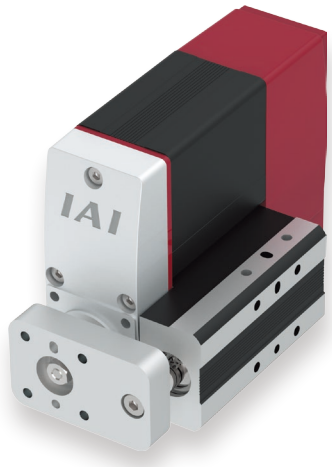


Table of Payload by Speed/Acceleration

Lead 6

Orientation	Horizontal		Vertical	
Speed (mm/s)	Acceleration (G)			
	0.3	0.5	0.3	0.5
0	2.5	2.5	1	1
300	2.5	2.5	1	1

Lead 4

Orientation	Horizontal		Vertical	
Speed (mm/s)	Acceleration (G)			
	0.3	0.5	0.3	0.5
0	4	4	1.5	1.5
200	4	4	1.5	1.5

Lead 2

Orientation	Horizontal	Vertical
Speed (mm/s)	Acceleration (G)	
	0.3	0.3
0	8	2.5
100	8	2.5

POINT Selection Notes

(1) Horizontal payload is the value when also using a guide so that radial and moment loads are not applied to the rod. If not installing a guide, refer to the correlation diagram of radial load and service life (P.67).
Use the double guide type if force will be applied in the direction of rotation.
(2) The maximum acceleration/deceleration is 0.3G for lead 2 and 0.5G for leads 4 and 6.
(3) When performing push-motion operation, refer to P.65.
(4) Be sure to select an option code for the guide mounting direction from the options table below.

Actuator Specifications

■ Lead and Payload

Model number	Lead (mm)	Max. payload		Max. push force (N)*
		Horizontal (kg)	Vertical (kg)	
EC-GS4H-①-②(-③)	6	2.5	1	30
EC-GS4M-①-②(-③)	4	4	1.5	45
EC-GS4L-①-②(-③)	2	8	2.5	90

■ Stroke and Max Speed

(Unit: mm/s)

Lead (mm)	30 (mm)	50 (mm)
6	300	
4	200	
2	100	

Legend: ① Stroke ② Cable Length ③ Option

*Speed limitation applies to push motion. See the manual or contact IAI.

① Stroke

① Stroke (mm)	EC-GS4
30	○
50	○

② Cable Length

Cable code	Cable length
0	No cable (with connector)
1~3	1~3m
4~5	4~5m
6~10	6~10m

③ Options

Name	Option code	Reference page
Brake	**B**	See P.59
Guide right mount	**GT2**	See P.60
Guide bottom mount	**GT3**	See P.60
Guide left mount	**GT4**	See P.60
PNP specification	**PN**	See P.62
Battery-less Absolute Encoder specification	**WA**	See P.62
Wireless communication specification	**WL**	See P.62

Actuator Specifications

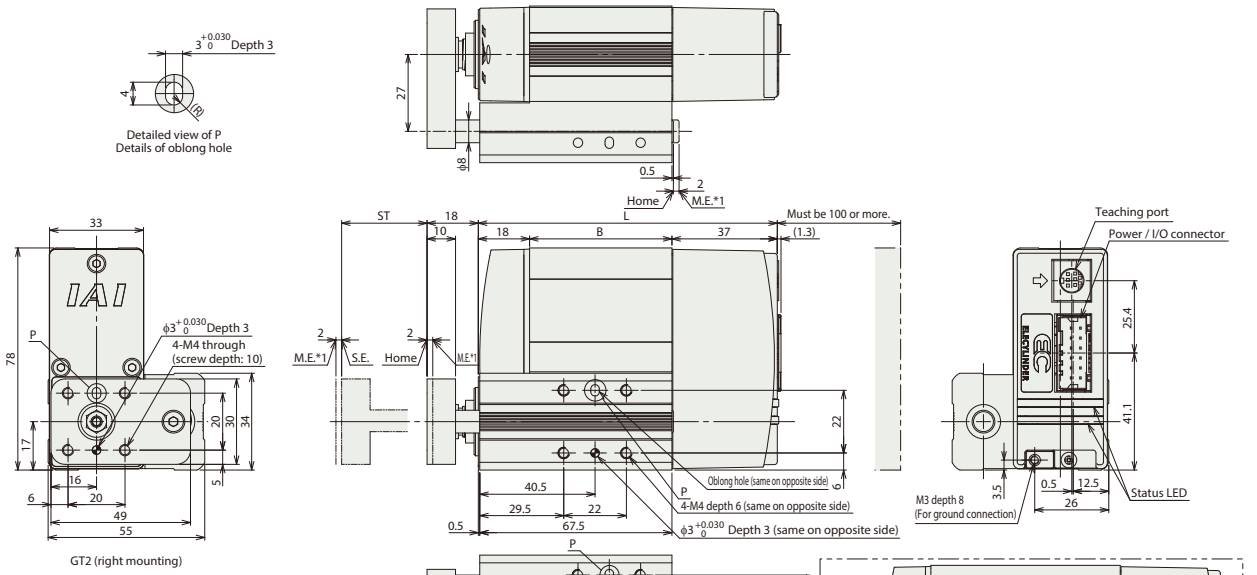
Item	Description
Drive system	Ball screw ϕ6mm, rolled C10
Positioning repeatability	±0.05mm
Frame	Material: Aluminum, black alumite treatment
Ambient operating temperature/humidity	0 to 40°C, 85% RH or less (Non-condensing)
Service life	5,000km or 50 million cycles

Dimensions

CAD drawings can be downloaded from our website.
www.intelligentactuator.com

2D CAD 3D CAD

*1 When the rod is returning to its home position, please be careful of interference from surrounding objects, as it will travel until it reaches the M.E.
M.E: Mechanical end S.E: Stroke end



* Compared to GT2 (right mounting), the ϕ3 frame positioning hole and oblong hole positions are reversed.

* Extension frame is additional for all specifications except INC 30 stroke without brake.

■ Dimensions and Mass by Stroke

Encoder Type		Incremental		Battery-less Absolute	
Stroke		30	50	30	50
L	W/o Brake	105	125	125	125
	With Brake	135	135	155	155
B	W/o Brake	50	70	70	70
	With Brake	80	80	100	100
Weight (kg)	W/o Brake	0.7	0.7	0.7	0.7
	With Brake	0.8	0.8	0.9	0.9

Controller side Options/Accessories

Name	Touch Panel Teaching Pendant	PC software	24VDC power supply
External view			
Model	☐ TB-02 (for wired connection only) ☐ TB-03 (for wired/wireless connection)	☐ RCM-101-MW (RS232 connection version) ☐ RCM-101-USB (USB connection version)	☐ PS-241 (100V input) ☐ PS-242 (200V input)
Overview	● TB-02 A teaching pendant equipped with functions such as start point, end point, and AVD input, trial operation, and monitoring. ● TB-03 A data setter that supports wireless connection. The start point, end point and AVD can be input with wireless connection.	Software for start point input, end point input and AVD input, trial operation, and monitoring using a PC. Both the RS232C version and USB version are available for PC connection.	A 24VDC power supply that can instantaneously output up to 17A. Input voltage 200VAC and 100VAC specifications are available.

* For system configurations using the above tools, refer to P.68.