

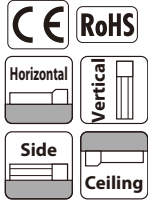
# EC-GD4

Mini Rod Type Double Guide Motor Unit Type Side-mounted Motor Body Width 76 mm 24v Stepper Motor

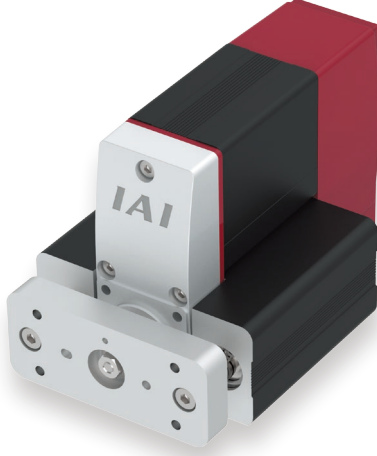
Model Specification Items

EC	GD4				
Series	Type	Lead	Stroke	Cable Length	Options
		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.



\* 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					Lead 4				
Orientation	Horizontal		Vertical		Orientation	Horizontal		Vertical	
	Acceleration (G)					Acceleration (G)			
Speed (mm/s)	0.3	0.5	0.3	0.5	Speed (mm/s)	0.3	0.5	0.3	0.5
0	2.5	2.5	1	1	0	4	4	1.5	1.5
300	2.5	2.5	1	1	200	4	4	1.5	1.5

Lead 2		
Orientation	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).
- (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.

### Actuator Specifications

Lead and Payload					Stroke and Max Speed (Unit: mm/s)				
Model number	Lead (mm)	Max. payload		Max. push force (N)*	Lead (mm)	30 (mm)		50 (mm)	
		Horizontal (kg)	Vertical (kg)						
EC-GD4H-①②③	6	2.5	1	30	6	300			
EC-GD4M-①②③	4	4	1.5	45	4	200			
EC-GD4L-①②③	2	8	2.5	90	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-GD4
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
PNP specification	PN	See P.62
Battery-less Absolute Encoder specification	WA	See P.62
Wireless communication specification	WL	See P.62

#### Actuator Specifications

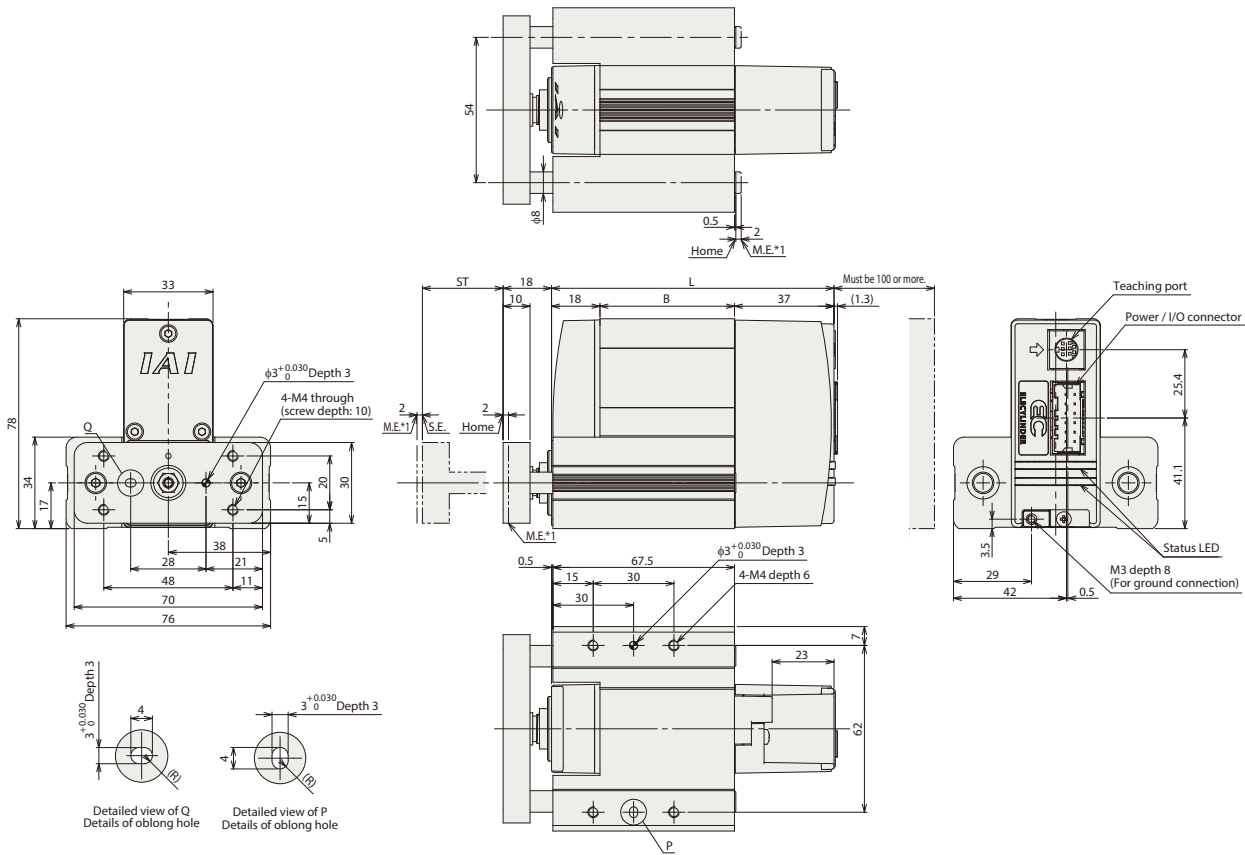
Item	Description
Drive system	Ball screw φ6mm, rolled C10
Positioning repeatability	±0.05mm
Frame	Material: Aluminum, black alumite treatment
Ambient operating temperature/humidity	0 to 40°C, 85% RH or less (Non-condensing)
Service life	5,000km or 50 million cycles

Dimensions

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

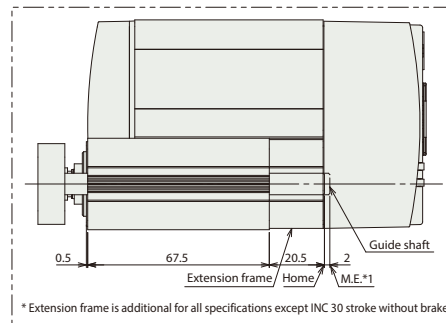


\*1 When the rod is returning to its home position, please be careful of interference from surrounding objects, as it will travel until it reaches the M.E.  
M.E: Mechanical end S.E: Stroke end



■ 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	0.9	0.9	0.9	0.9
	With Brake	1.0	1.0	1.0	1.1



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

Controller side Options/Accessories

Name	Touch Panel Teaching Pendant	PC software	24VDC power supply
External view			
Model	<input type="checkbox"/> TB-02 (for wired connection only) <input type="checkbox"/> TB-03 (for wired/wireless connection)	<input type="checkbox"/> RCM-101-MW (RS232 connection version) <input type="checkbox"/> RCM-101-USB (USB connection version)	<input type="checkbox"/> PS-241 (100V input) <input type="checkbox"/> PS-242 (200V input)
Overview	<ul style="list-style-type: none"> <li>● TB-02 A teaching pendant equipped with functions such as start point, end point, and AVD input, trial operation, and monitoring.</li> <li>● TB-03 A data setter that supports wireless connection. The start point, end point and AVD can be input with wireless connection.</li> </ul>	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.