

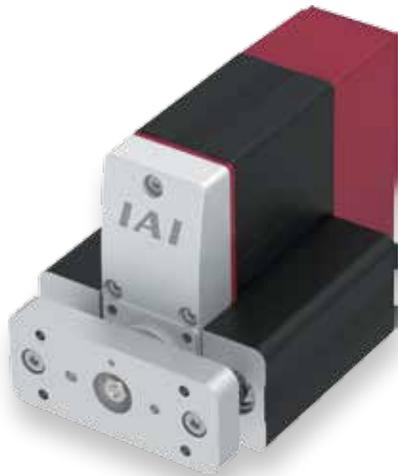
EC-GD4

Mini 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 1 1m 10 10m	Refer to Options below.



CE RoHS

Horizontal Vertical Side Ceiling

POINT Selection Notes

- (1) The actuator specifications display the payload's maximum value, but it will vary depending on the acceleration and speed. Please refer to "Table of Payload by Speed/Acceleration" for more details.
- (2) The value for horizontal payload assumes the use of an external guide so that radial and moment loads are not applied on the rod. If a guide is not installed, please refer to the "Correlation between Radial Load and Operation Life" (P111).
- (3) When performing a push-motion operation, please refer to the "Correlation between push force and current limit value." Push force is only a guide. Please refer to P115 for cautions.
- (4) Special attention needs to be paid to the mounting orientation. Please refer to P33 for details.

Stroke	
Stroke (mm)	EC-GD4
30	○
50	○

Options			
Name	Option code	Reference page	
Brake	B	See P.101	
PNP specification	PN	See P.108	
Split motor and controller power supply specification	TMD2	See P.109	
Battery-less Absolute Encoder specification	WA	See P.109	
Wireless communication specification	WL	See P.109	
Wireless axis-operation specification	WL2	See P.109	

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

(Note) Robot cables.

Main specifications						
Item		Description				
Lead	Ball screw lead (mm)	6	4	2		
Horizontal	Payload	Max. payload (kg)	2.5	4	8	
		Max. speed (mm/s)	300	200	100	
		Min. speed (mm/s)	7.5	5	2.5	
		Rated acceleration/deceleration (G)	0.3	0.3	0.3	
		Max. acceleration/deceleration (G)	0.5	0.5	0.3	
Vertical	Payload	Max. payload (kg)	1	1.5	2.5	
		Max. speed (mm/s)	300	200	100	
		Min. speed (mm/s)	7.5	5	2.5	
		Rated acceleration/deceleration (G)	0.3	0.3	0.3	
		Max. acceleration/deceleration (G)	0.5	0.5	0.3	
Push force	Pushing max. thrust force (N)*	30	45	90		
	Pushing max. speed (mm/s)	20	20	20		
Brake	Brake holding specification	Non-excitation actuating solenoid brake				
	Brake holding force (kgf)	1	1.5	2.5		
Stroke	Min. stroke (mm)	30	30	30		
	Max. stroke (mm)	50	50	50		
	Stroke pitch (mm)	20	20	20		

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

Table of Payload by Speed/Acceleration

Unit for payload is kg.

Lead 6

Orientation	Horizontal		Vertical	
	Speed (mm/s)	Acceleration (G)	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)		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

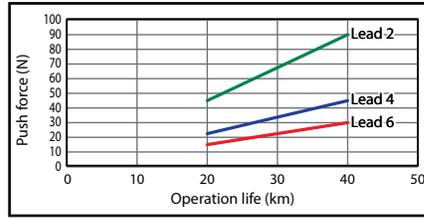
Orientation	Horizontal	Vertical
	Speed (mm/s)	Acceleration (G)
	0.3	0.3
0	8	2.5
100	8	2.5

Stroke and maximum speed

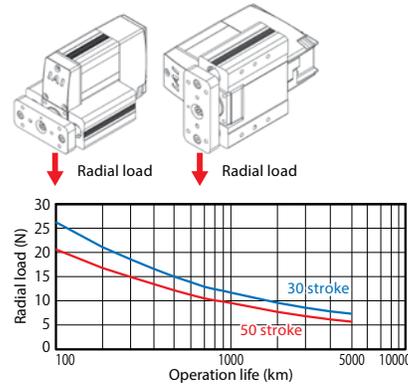
Lead (mm)	30 (mm)	50 (mm)
6	300	
4	200	
2	100	

(Unit is mm/s)

Correlation between push force and current limit value



Radial load and operational service life

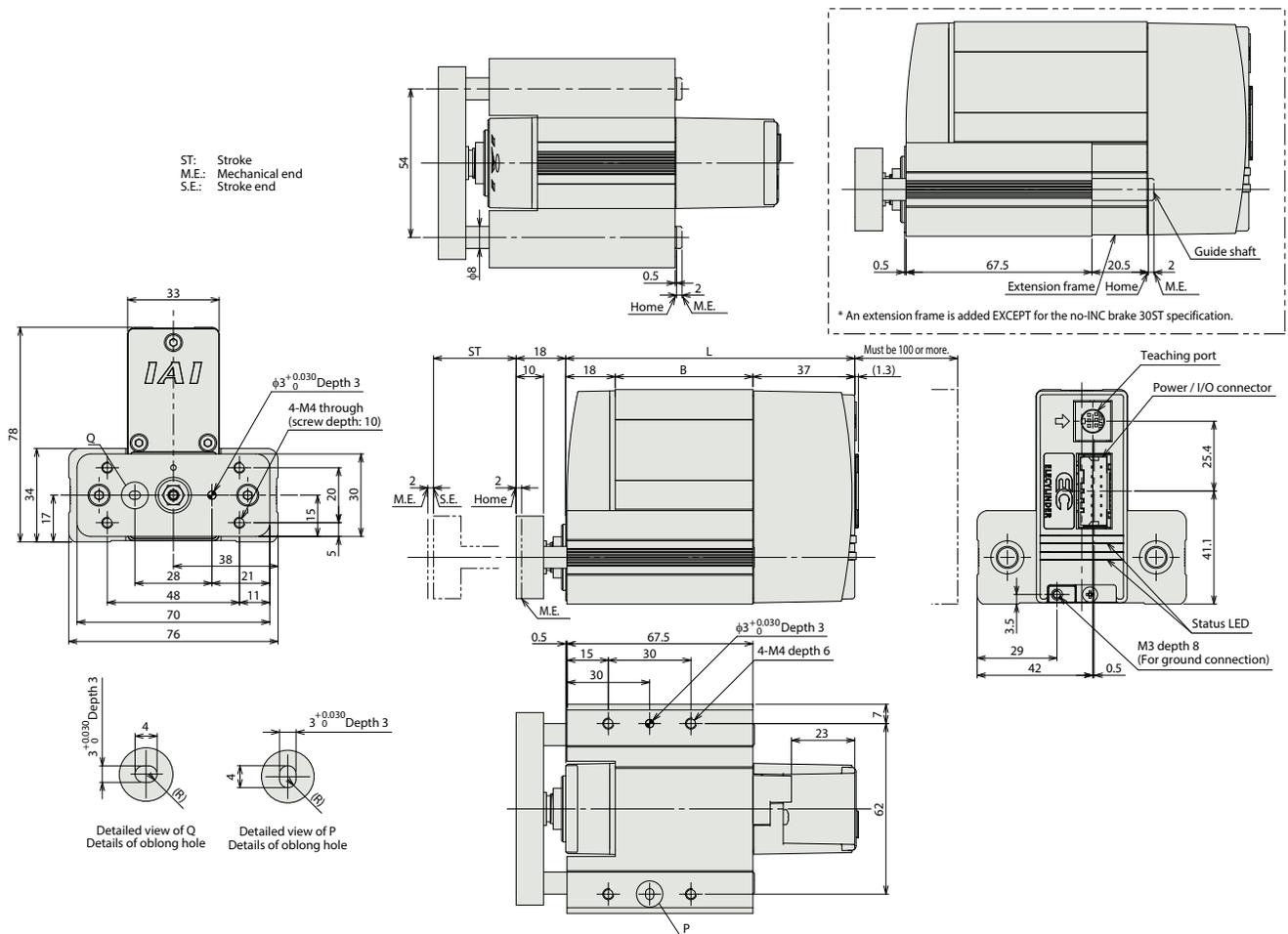


Dimensions

(Note) 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.

CAD drawings can be downloaded from our website.

www.intelligentactuator.com



Dimensions by stroke

	Encoder	Incremental		Battery-less absolute	
		Stroke	30	50	30
L	Without brake	105	125	125	125
	With brake	135	135	155	155
B	Without brake	50	70	70	70
	With brake	80	80	100	100

Mass by stroke

	Encoder	Incremental		Battery-less absolute	
		Stroke	30	50	30
Weight (kg)	Without brake	0.9	0.9	0.9	0.9
	With brake	1.0	1.0	1.0	1.1

Applicable controller

(Note) The EC series is equipped with a built-in controller. Please refer to P116 for details.