

Electric actuator Stepper motor specification
Slider

EBS-*G* Series



Electric actuator For rechargeable batteries
Slider EBS-G P4 Series
Catalog No. CC-1556A

Specifications

Item		EBS-04GE		EBS-04GR/D/L	
Motor		□35. Stepping motor			
Encoder type		Battery-less absolute encoder/ incremental encoder			
Drive method		Ball screw ø10			
Stroke *1 *2 mm		50 to 500			
Screw lead mm		6	12	6	12
Max.workload kg	Horizontal	20	15	20	11.7
	Vertical	9.2	3.3	9.2	3.3
*3					
Operation speed range *4 mm/s		7 to 260	15 to 400	7 to 200	15 to 320
Maximum pressing force N		155	77	155	77
Repeatability mm		±0.01			
Lost motion mm		0.1 or less			
Static allowable moment N·m		MP:62 MY:62 MR:92			
Motor power supply voltage		24 VDC ±10%			
Motor section max. instantaneous current A		2.4			
Brake current consumption A		0.4			

Item		EBS-05GE				EBS-05GR/D/L			
Motor		□42. Stepper motor							
Encoder type		Battery-less absolute encoder/incremental encoder							
Drive method		Ball screw ø12							
Stroke *1 *2 mm		50 to 800							
Screw lead mm		2	5	10	20	2	5	10	20
Max.workload kg	Horizontal	45	40	27.5	18.3	45	40	27.5	18.3
	Vertical	18.3	14	7	2.5	18.3	10	3.3	0.8
*3									
Operation speed range *4 mm/s		2 to 100	6 to 230	12 to 400	25 to 680	2 to 80	6 to 200	12 to 320	25 to 560
Maximum pressing force N		550	220	110	55	550	220	110	55
Repeatability mm		±0.01							
Lost motion mm		0.1 or less							
Static allowable moment N·m		MP:103 MY:103 MR:144							
Motor power supply voltage		24 VDC ±10%							
Motor section max. instantaneous current A		2.7							
Brake current consumption A		0.4							

Item		EBS-08GE			EBS-08GR/D/L		
Motor		□56. Stepping motor					
Encoder type		Battery-less absolute encoder/incremental encoder					
Drive method		Ball screw ø16					
Stroke *1 mm		50 to 1100					
Screw lead mm		5	10	20	5	10	20
Max.workload kg	Horizontal	80	70	30	80	70	30
	Vertical	43.3	28.3	3.3	33.3	18.3	3.3
*3							
Operation speed range *4 mm/s		6 to 120	12 to 200	25 to 400	6 to 100	12 to 200	25 to 320
Maximum pressing force N		965	482	241	965	482	241
Repeatability mm		±0.01					
Lost motion mm		0.1 or less					
Static allowable moment N·m		MP:203 MY:203 MR:336					
Motor power supply voltage		24 VDC ±10%					
Motor section max. instantaneous current A		4.0					
Brake current consumption A		0.4					

*1 Stroke is 50 pitch.
 *2 When the motor is left-side wrap (L) with fittings (C), 50 mm Stroke cannot be selected.
 *3 Load capacity varies according to acceleration/deceleration and speed.
 *4 The maximum speed may decrease depending on the conditions.

Compatibility table by variation

	EBS
P4	●

●: Applicable models ○: Semi-applicable models
 ▲: Contact CKD for details. □: Not applicable

How to order

EBS - 05 G E - 10 0100 N B N - C S03 - U C - P4

Model No.

A Body size

B Compatible controllers

C Motor mounting direction

D Screw lead

E Stroke

F Brake

G Encoder

H Relay cable

I Anti-rust treatment

J Fitting

[Example of model No.]

EBS-05GE-100100NBN-CS03-UC-P4

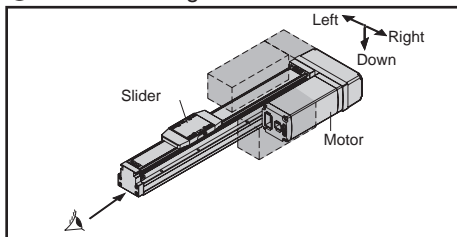
- A** Body size: body width 54mm
- B** Compatible controller: For ECG
- C** Motor mounting method: standard mounting (straight)
- D** Screw lead: 10 mm
- E** Stroke: 100 mm
- F** Brake: Without brake
- G** Encoder: Battery-less absolute encoder
- H** Relay cable: fixed cable 3 m
- I** Anti-rust treatment: with
- J** Fitting: Yes (attached at shipment)

*1 For EBS-04 and 05 with fitting (C) for left side motor return (L), 50 mm Stroke cannot be selected.

*2 For vertical use, select "Yes".

*3 Positioning pin holes may not be surface treated.

C Motor mounting direction



Code	Description
A Body size	
04	Body width 44mm
05	Body width 54mm
08	Body width 82mm
B Compatible controllers	
G	For ECG
C Motor mounting direction	
E	Standard mounting (straight)
R	Right mounting
D	Bottom mounting
L	Left mounting
D Screw lead	
02	2 mm
05	5 mm
06	6 mm
10	10 mm
12	12 mm
20	20 mm
E Stroke *1	
0050 to 1100	50mm to 1100mm (In 50mm increments)
F Brake *2	
N	Without brake
B	With brake
G Encoder	
B	Battery-less absolute encoder
C	Incremental encoder
H Relay cable	
N00	None
S01	Fixed cable 1 m
S03	Fixed cable 3 m
S05	Fixed cable 5 m
S10	Fixed cable 10 m
R01	Movable cable 1 m
R03	Movable cable 3 m
R05	Movable cable 5 m
R10	Movable cable 10 m
I Anti-rust treatment *3	
N	None
U	Yes
J Fitting	
N	None
C	Yes (Included at shipment)

[Applicable controller]

Refer to "Electric Actuator rechargeable battery compatible Controller ECG Series (Catalog No.CC-1556A)" for details.

ECG-ANNN30 - NP A 02

A Interface specifications	
NP	Parallel I/O (common to NPN and PNP)
LK	IO-Link
CL	CC-Link
EC	EtherCAT
EN	EtherNet/IP

B Mounting method	
A	Standard mount
D	DIN rail mount

C IO cable length *1	
00	None
02	2m
03	3m
05	5m
10	10m

*1 Select "None" unless the interface specification "parallel I/O" is selected.

● Motor cable (fixed/movable)

* An actuator type is also available.

EA-CBLM3 - S 01

A Cable type	
S	Fixed cable
R	Movable cable

B Cable length	
01	1m
03	3m
05	5m
10	10m

● Encoder cable (fixed/movable)

* An actuator type is also available.

EA-CBLE3 - S 01

A Cable type	
S	Fixed cable
R	Movable cable

B Cable length	
01	1m
03	3m
05	5m
10	10m

● I/O cable

* Parallel I/O specification controller also available

EA-CBLNP2 - 02

A Cable length	
02	2m
03	3m
05	5m
10	10m

P4 Series
Pneumatic actuator
Pneumatic valves
Pneumatic auxiliary components
Gas generator
Fluid control components
Electric actuator