

EBS-M

Slider



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EBS
(With motor)

EBR
(With motor)

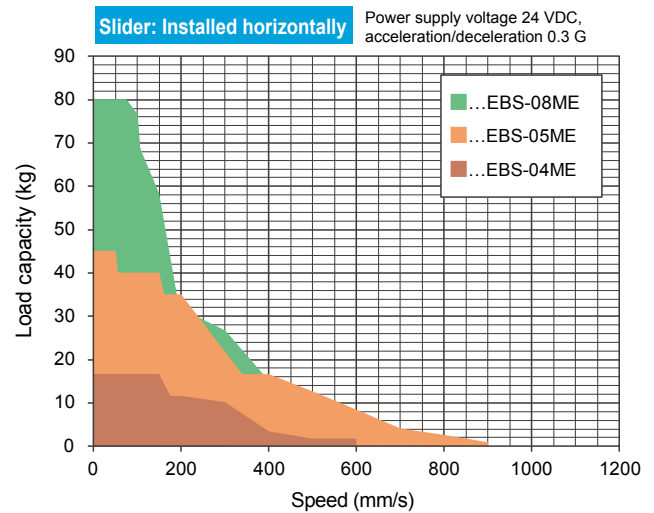
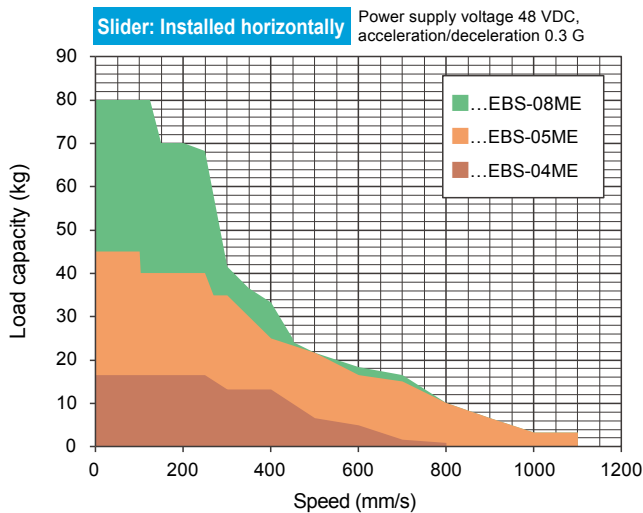
ECR
(Controller)

Safety
precautions

Series variation

Type	Model No.		Motor size	Motor mounting direction	Body width (mm)	Screw lead (mm)	Max. load capacity (kg)		Maximum pressing force (N)	
							Horizontal	Vertical		
Slider		EBS-04ME-06	□35	Straight	44	6	16.6	8.3	177	
		EBS-04ME-12				12	13.3	3.3	89	
		EBS-04MR/D/L-06		Side/Bottom		6	16.6	8.3	177	
		EBS-04MR/D/L-12				12	13.3	3.3	89	
		EBS-05ME-02	□42	Straight	54	2	45	24	385	
		EBS-05ME-05				5	40	16.6	250	
		EBS-05ME-10				10	35	8.3	121	
		EBS-05ME-20				20	16.6	4.5	44	
		EBS-05MR/D/L-02		Side/Bottom		2	45	24	385	
		EBS-05MR/D/L-05				5	40	16.6	250	
		EBS-05MR/D/L-10				10	35	8.3	121	
		EBS-05MR/D/L-20				20	16.6	4.5	44	
		EBS-08ME-05	□56	Straight	82	5	80	40	970	
		EBS-08ME-10				10	70	18.3	477	
		EBS-08ME-20				20	43.3	10	250	
		EBS-08MR/D/L-05		Side/Bottom		5	80	40	970	
		EBS-08MR/D/L-10				10	70	18.3	477	
		EBS-08MR/D/L-20				20	43.3	8.3	250	

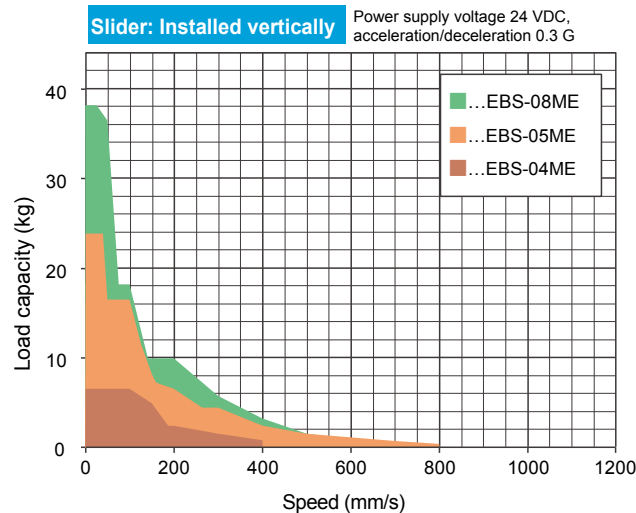
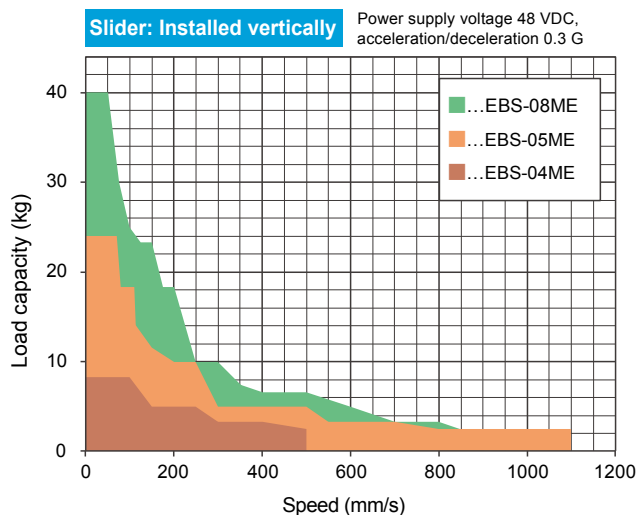
Safety precautions

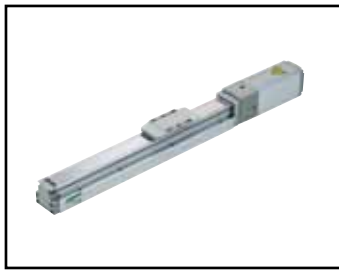


	Stroke length (mm) and max. speed (mm/s)																					Page		
	50 mm	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100		
	400 mm/s																							4
	800																							
	400																							6
	700																							
	130										120	105	95	80	70									10
	300											270	235	200	185									
	700										625	540	475	415	370									
	1100											1080	950	830	740									
	130										120	105	95	80	70									12
	300											270	235	200	185									
	600											540	475	415	370									
	1100											1080	950	830	740									
	250															220	200	180	135	120	110	100	16	
	550														510	450	410	370	270	240	225	200		
	1100													1000	910	820	740	540	490	450	410			
	225															220	200	180	135	120	110	100	18	
	550														510	450	410	370	270	240	225	200		
	1000															910	820	740	540	490	450	410		

* This data is at power supply voltage 48 VDC and acceleration/ deceleration 0.3 G.

* The load capacity when wall mounted is the same as for horizontal installation.





Electric actuator Slider

EBS-04ME

Straight motor mounting

☐ 35 Stepper motor
with battery-less absolute encoder



How to order

EBS	-	04	M	E	-	06	0300	N	A	N - C	S03
		A	B	C			D	E	F	G	H
A Body size											
04 Body width 44 mm											
B Motor											
M Yes											
C Motor mounting direction											
E Straight mounting											
D Screw lead											
06 6 mm											
12 12 mm											
E Stroke length											
0050 to 0500											
50 mm (In 50 mm increments)											
500 mm											
F Brake *1											
N Without brake											
B With brake											
G Encoder											
A Battery-less absolute encoder											
H Relay cable *2 *3											
N00 None											
S01 Fixing cable 1 m											
S03 Fixing cable 3 m											
S05 Fixing cable 5 m											
S10 Fixing cable 10 m											
R01 Movable cable 1 m											
R03 Movable cable 3 m											
R05 Movable cable 5 m											
R10 Movable cable 10 m											

*1 Select "With brake" for vertical use.

*2 Select the controller from page 61.

*3 Refer to page 71 for relay cable dimensions.

Product subject to the EAR (EAR99)

Specifications

Motor	☐ 35 Stepper motor	
Encoder type	Battery-less absolute encoder	
Drive method	Ball screw $\varnothing 10$	
Stroke length	mm	50 to 500
Screw lead	mm	6 12
Max. load capacity	kg	Horizontal 16.6(16.6) 13.3(11.6)
	*1 *2	Vertical 8.3(6.6) 3.3(2.5)
Operation speed range	*3 *4 mm/s	7 to 400(200) 15 to 800(600)
Maximum pressing force	N	177 89
Pressing operation speed range	mm/s	5 to 25 5 to 30
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 $\pm 10\%$ or 48 VDC $\pm 10\%$	
Motor section max. instantaneous current	A	4.0
Brake	Model, power supply voltage	Non-excitation operation, 24 VDC $\pm 10\%$
	Power consumption	W 7
	Holding force	N 126 63
Insulation resistance	10 M Ω , 500 VDC	
Withstand voltage	500 VAC for 1 minute	
Operating ambient temperature, humidity	0 to 40°C (no freezing) 35 to 80% RH (no condensation)	
Storage ambient temperature, humidity	-10 to 50°C (no freezing) 35 to 80% RH (no condensation)	
Atmosphere	No corrosive gas, explosive gas, or dust	
Degree of protection	IP40	

*1 The values in () are at 24 VDC.

*2 Load capacity varies according to acceleration/deceleration and speed. Refer to page 28 for details.

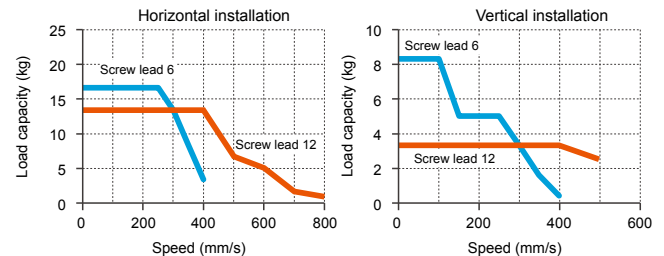
*3 The maximum speed values in () are at 24 VDC.

*4 The maximum speed may decrease depending on the conditions.

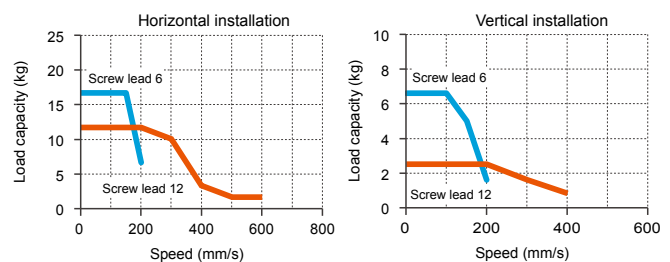
Speed and load capacity

[At 48 VDC]

*Acceleration/deceleration 0.3 G



[At 24 VDC]

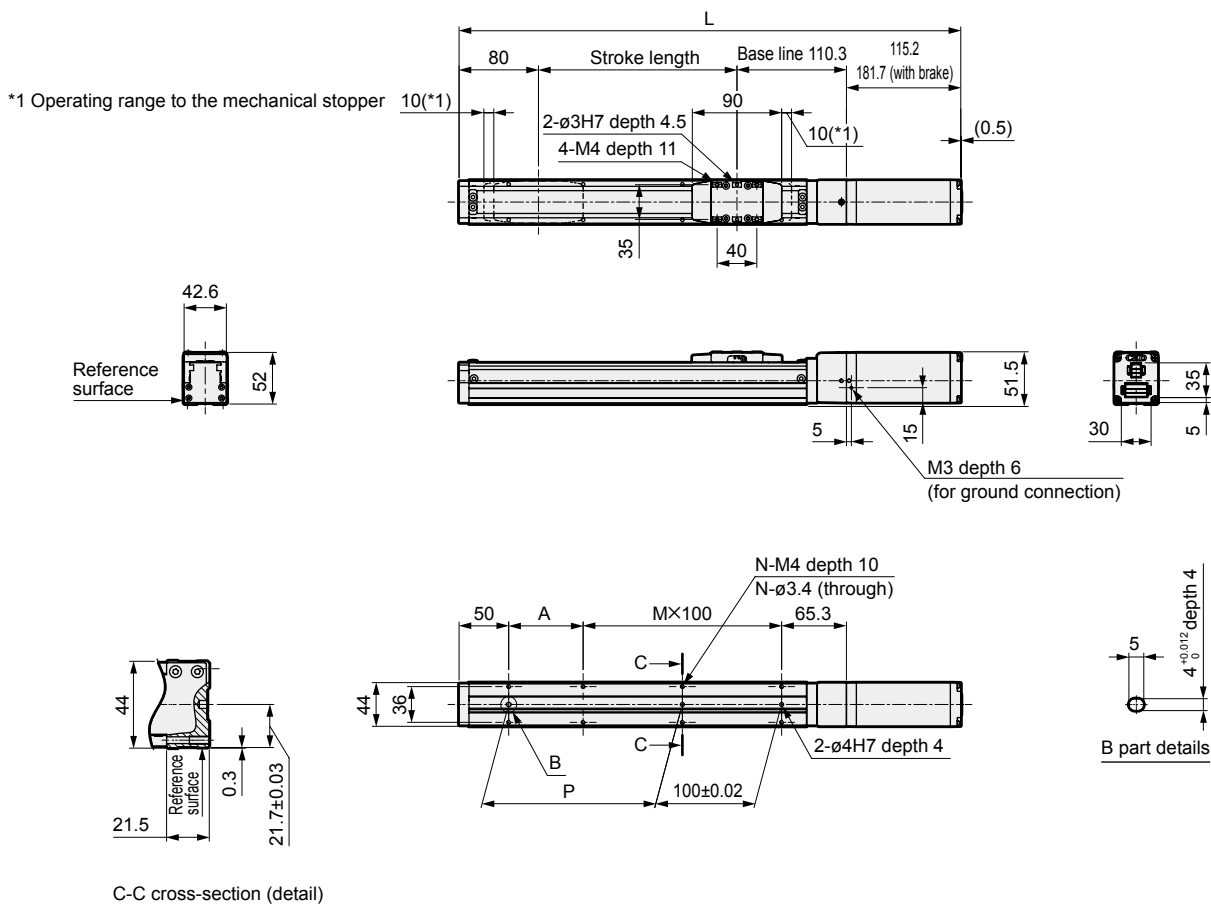


Stroke length and max. speed

Screw lead	Power supply voltage	Stroke
		50 to 500
6	48 VDC	400
	24 VDC	200
12	48 VDC	800
	24 VDC	600

Dimensions Straight motor mounting

● EBS-04ME



Stroke code		0050	0100	0150	0200	0250	0300	0350	0400	0450	0500
Stroke length (mm)		50	100	150	200	250	300	350	400	450	500
L	Without brake	355.5	405.5	455.5	505.5	555.5	605.5	655.5	705.5	755.5	805.5
	With brake	422	472	522	572	622	672	722	772	822	872
A		25	75	25	75	25	75	25	75	25	75
M		1	1	2	2	3	3	4	4	5	5
N		6	6	8	8	10	10	12	12	14	14
P		25	75	125	175	225	275	325	375	425	475
Weight (kg)	Without brake	1.5	1.6	1.8	1.9	2.0	2.2	2.3	2.4	2.6	2.7
	With brake	2.0	2.1	2.3	2.4	2.5	2.7	2.8	2.9	3.1	3.2

EBS
(With motor)

EBR
(With motor)

ECR
(Controller)

Safety
precautions



Electric actuator Slider

EBS-04M*

Motor mounting on side/bottom

□ 35 Stepper motor
with battery-less absolute encoder



How to order

EBS - **04** **M** **R** - **06** **0300** **N** **A** **N - C** **S03**

A Body size
04 Body width 44 mm

B Motor
M Yes

C Motor mounting direction
R Right-side mounting
D Bottom mounting
L Left-side mounting

E Stroke length
0050 to 0500
50 mm (In 50 mm increments)
500 mm

F Brake
N Without brake
B With brake

D Screw lead
06 6 mm
12 12 mm

G Encoder
A Battery-less absolute encoder

H Relay cable
*2 *3
N00 None
S01 Fixing cable 1 m
S03 Fixing cable 3 m
S05 Fixing cable 5 m
S10 Fixing cable 10 m
R01 Movable cable 1 m
R03 Movable cable 3 m
R05 Movable cable 5 m
R10 Movable cable 10 m

*1 Select "With brake" for vertical use.

*2 Select the controller from page 61.

*3 Refer to page 71 for relay cable dimensions.

Product subject to the EAR (EAR99)

Specifications

Motor	□ 35 Stepper motor	
Encoder type	Battery-less absolute encoder	
Drive method	Ball screw ø10	
Stroke length	mm	50 to 500
Screw lead	mm	6 12
Max. load capacity	kg	Horizontal 16.6(16.6) 13.3(11.6) *1 *2 Vertical 8.3(6.6) 3.3(2.5)
Operation speed range	mm/s	7 to 400(200) 15 to 700(500)
Maximum pressing force	N	177 89
Pressing operation speed range	mm/s	5 to 25 5 to 30
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% or 48 VDC ±10%	
Motor section max. instantaneous current	A	4.0
Brake	Model, power supply voltage	Non-excitation operation, 24 VDC ±10%
	Power consumption	W 7
	Holding force	N 126 63
Insulation resistance	10 MΩ, 500 VDC	
Withstand voltage	500 VAC for 1 minute	
Operating ambient temperature, humidity	0 to 40 °C (no freezing) 35 to 80% RH (no condensation)	
Storage ambient temperature, humidity	-10 to 50 °C (no freezing) 35 to 80% RH (no condensation)	
Atmosphere	No corrosive gas, explosive gas, or dust	
Degree of protection	IP40	

*1 The values in () are at 24 VDC.

*2 Load capacity varies according to acceleration/deceleration and speed. Refer to page 28 for details.

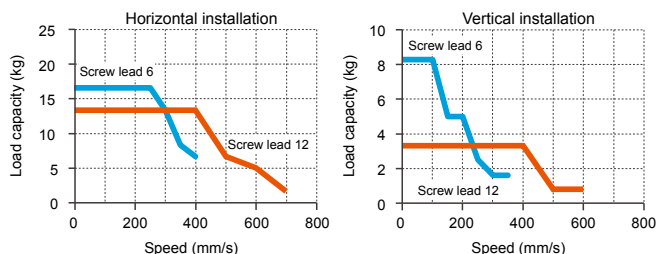
*3 The maximum speed values in () are at 24 VDC.

*4 The maximum speed may decrease depending on the conditions.

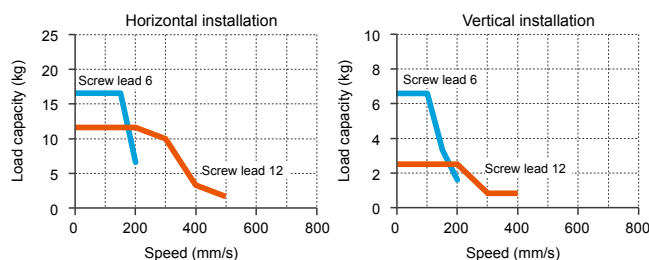
Speed and load capacity

[At 48 VDC]

*Acceleration/deceleration 0.3 G



[At 24 VDC]



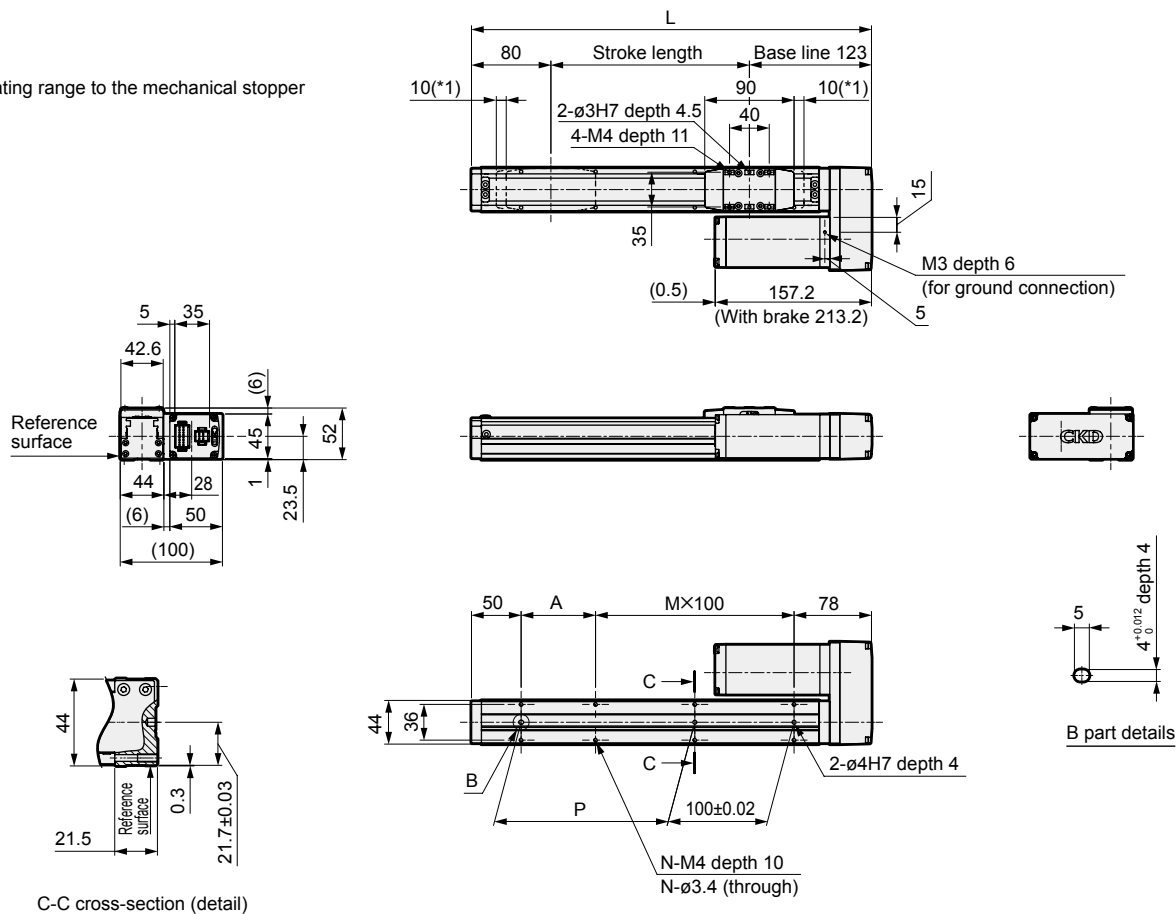
Stroke length and max. speed

Screw lead	Power supply voltage	Stroke
		50 to 500
6	48 VDC	400
	24 VDC	200
12	48 VDC	700
	24 VDC	500

Dimensions Motor right-side mounting

● EBS-04MR

*1 Operating range to the mechanical stopper



C-C cross-section (detail)

Stroke code		0050	0100	0150	0200	0250	0300	0350	0400	0450	0500
Stroke length (mm)		50	100	150	200	250	300	350	400	450	500
L		253	303	353	403	453	503	553	603	653	703
A		25	75	25	75	25	75	25	75	25	75
M		1	1	2	2	3	3	4	4	5	5
N		6	6	8	8	10	10	12	12	14	14
P		25	75	125	175	225	275	325	375	425	475
Weight (kg)	Without brake	1.7	1.9	2.0	2.2	2.4	2.6	2.7	2.9	3.1	3.3
	With brake	2.2	2.4	2.5	2.7	2.9	3.1	3.2	3.4	3.6	3.8

EBS
(With motor)

EBR
(With motor)

ECR
(Controller)

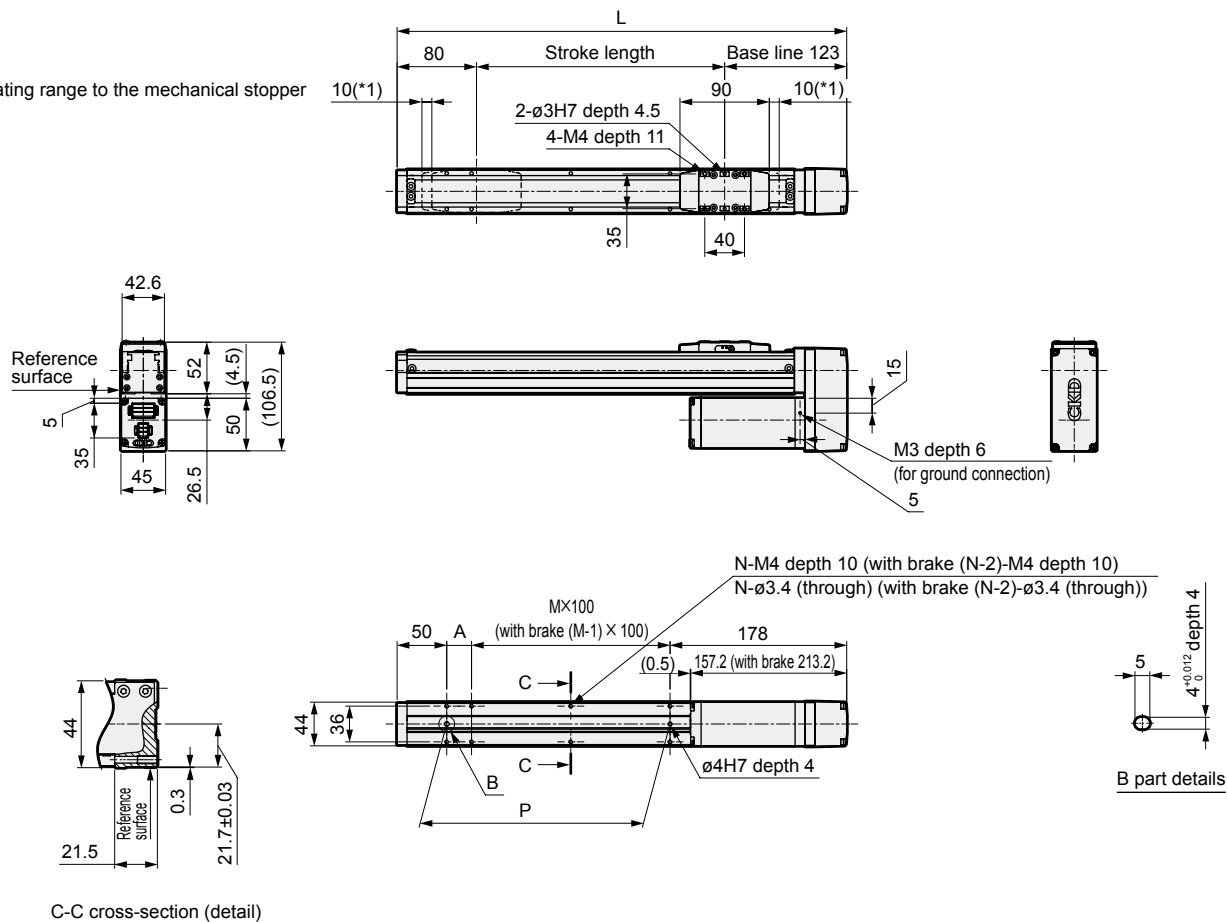
Safety
precautions

EBS-04M*

Dimensions Motor bottom mounting

● EBS-04MD

*1 Operating range to the mechanical stopper

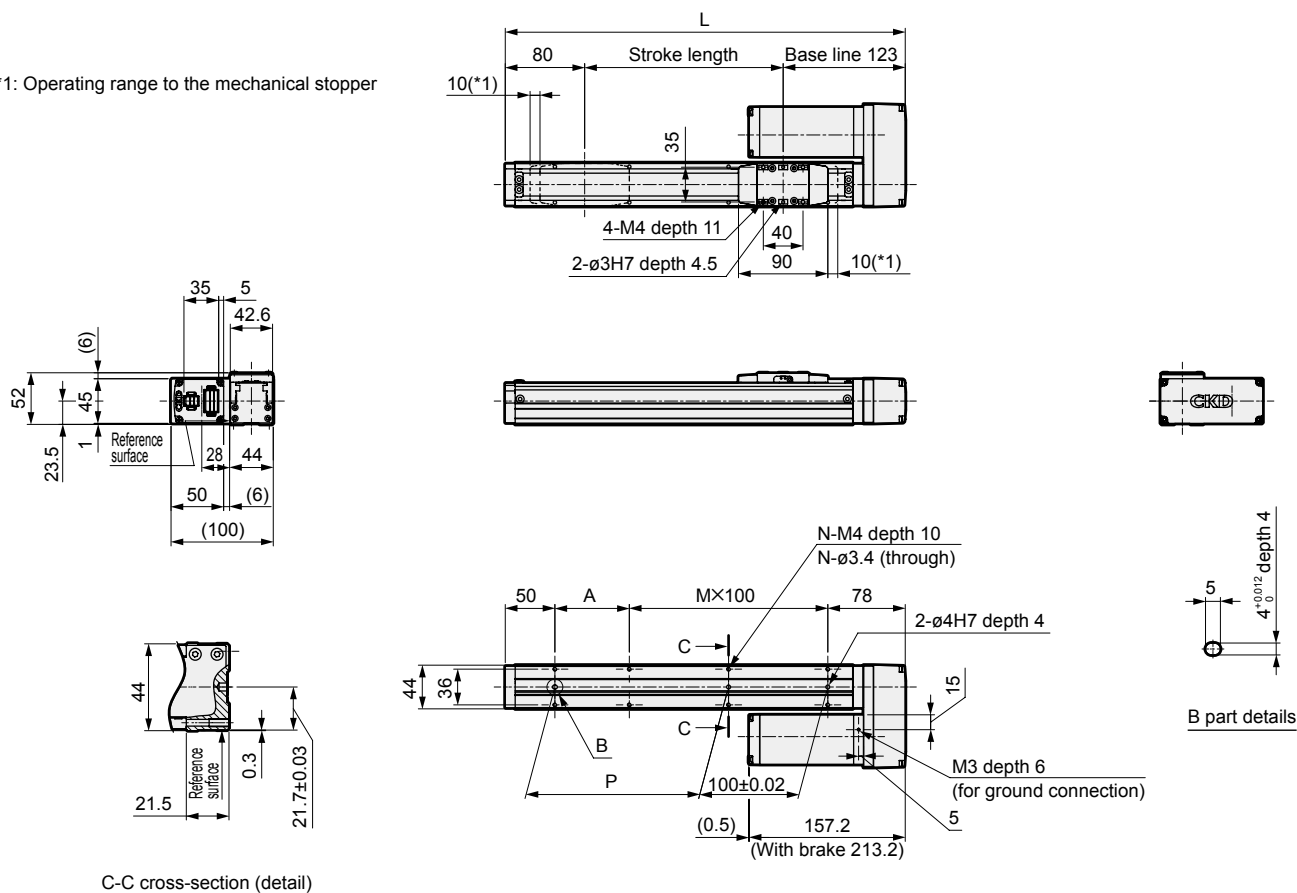


Stroke code		0250	0300	0350	0400	0450	0500
Stroke length (mm)		250	300	350	400	450	500
L		453	503	553	603	653	703
A		25	75	25	75	25	75
M		2	2	3	3	4	4
N		8	8	10	10	12	12
P		225	275	325	375	425	475
Weight (kg)	Without brake	2.4	2.6	2.7	2.9	3.1	3.3
	With brake	2.9	3.1	3.2	3.4	3.6	3.8

Dimensions Motor left-side mounting

● EBS-04ML

*1: Operating range to the mechanical stopper



C-C cross-section (detail)

Stroke code		0050	0100	0150	0200	0250	0300	0350	0400	0450	0500
Stroke length (mm)		50	100	150	200	250	300	350	400	450	500
L		253	303	353	403	453	503	553	603	653	703
A		25	75	25	75	25	75	25	75	25	75
M		1	1	2	2	3	3	4	4	5	5
N		6	6	8	8	10	10	12	12	14	14
P		25	75	125	175	225	275	325	375	425	475
Weight (kg)	Without brake	1.7	1.9	2.0	2.2	2.4	2.6	2.7	2.9	3.1	3.3
	With brake	2.2	2.4	2.5	2.7	2.9	3.1	3.2	3.4	3.6	3.8

EBS
(With motor)

EBR
(With motor)

ECR
(Controller)

Safety
precautions



Electric actuator Slider

EBS-05ME

Straight motor mounting

□42 Stepper motor
with battery-less absolute encoder



EBS
(With motor)

EBR
(With motor)

ECR
(Controller)

How to order

EBS - **05** **M** **E** - **05** **0300** **N** **A** **N - C** **S03**

A Body size
05 Body width 54 mm

B Motor
M Yes

C Motor mounting direction
E Straight mounting

D Screw lead
02 2 mm
05 5 mm
10 10 mm
20 20 mm

E Stroke length
0050 to 0800
50 mm (In 50 mm increments)
800 mm

F Brake
N Without brake
B With brake

G Encoder
A Battery-less absolute encoder

H Relay cable
*2 *3
N00 None
S01 Fixing cable 1 m
S03 Fixing cable 3 m
S05 Fixing cable 5 m
S10 Fixing cable 10 m
R01 Movable cable 1 m
R03 Movable cable 3 m
R05 Movable cable 5 m
R10 Movable cable 10 m

*1 Select "With brake" for vertical use.

*2 Select the controller from page 61.

*3 Refer to page 71 for relay cable dimensions.

Product subject to the EAR (EAR99)

Specifications

Motor	□42 Stepper motor			
Encoder type	Battery-less absolute encoder			
Drive method	Ball screw ø12			
Stroke length	mm	50 to 800		
Screw lead	mm	2	5	10
Max. load capacity	kg	45(45)	40(40)	35(35)
*1 *2	Horizontal	24(24)	16.6(16.6)	8.3(8.3)
	Vertical	16.6(16.6)	8.3(8.3)	4.5(4.5)
Operation speed range	mm/s	2 to 130	6 to 300	12 to 700
*3 *4	(70)	(250)	(600)	(900)
Maximum pressing force	N	385	250	121
Pressing operation speed range	mm/s	5 to 25	5 to 25	5 to 30
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% or 48 VDC ±10%		
Motor section max. instantaneous current	A	5.2		
Brake	Model, power supply voltage	Non-excitation operation, 24 VDC ±10%		
	Power consumption	7		
	Holding force	N	471	188
Insulation resistance		10 MΩ, 500 VDC		
Withstand voltage		500 VAC for 1 minute		
Operating ambient temperature, humidity		0 to 40°C (no freezing) 35 to 80% RH (no condensation)		
Storage ambient temperature, humidity		-10 to 50°C (no freezing) 35 to 80% RH (no condensation)		
Atmosphere		No corrosive gas, explosive gas, or dust		
Degree of protection		IP40		

*1 The values in () are at 24 VDC.

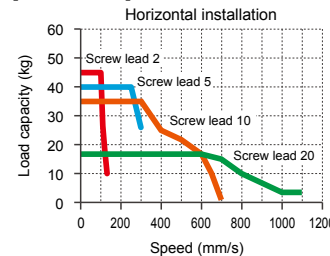
*2 Load capacity varies according to acceleration/deceleration and speed. Refer to page 28 for details.

*3 The maximum speed values in () are at 24 VDC.

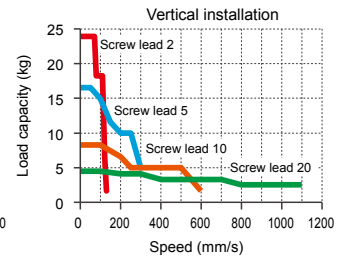
*4 The maximum speed may decrease depending on the conditions.

Speed and load capacity

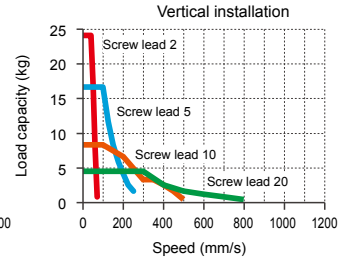
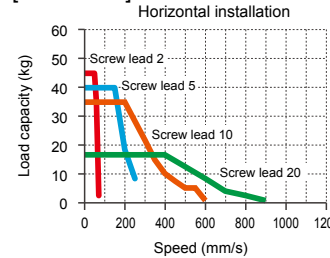
[At 48 VDC]



*Acceleration/deceleration 0.3 G



[At 24 VDC]



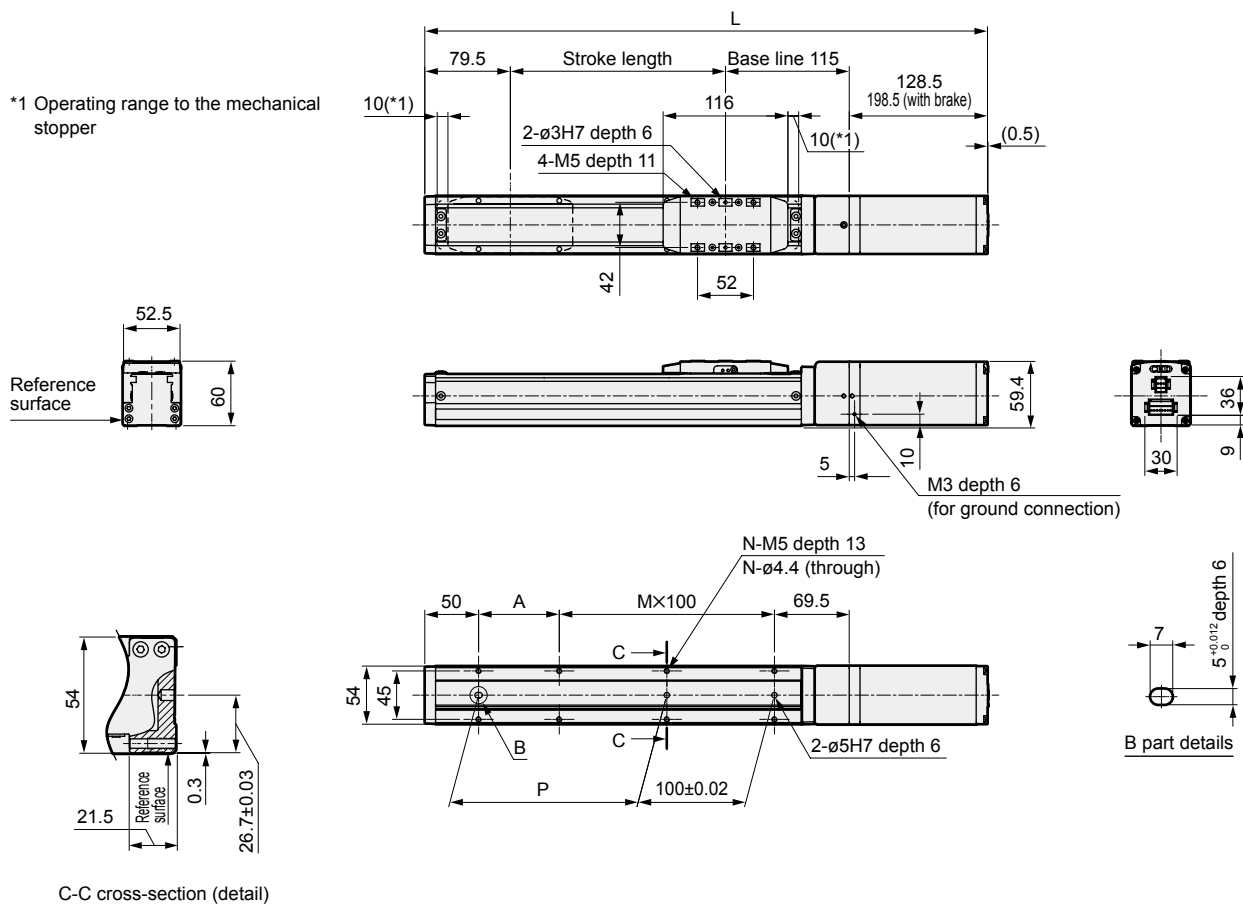
Stroke length and max. speed

(mm/s)

Screw lead	Power supply voltage	Stroke						
		50 to 500	550	600	650	700	750	800
2	48 VDC	130	120	120	105	95	80	70
	24 VDC	70	70	70	70	70	70	70
5	48 VDC	300	300	300	270	235	200	185
	24 VDC	250	250	250	250	235	200	185
10	48 VDC	700	625	625	540	475	415	370
	24 VDC	600	600	600	540	475	415	370
20	48 VDC	1100	1100	1100	1080	950	830	740
	24 VDC	900	900	900	900	900	830	740

Dimensions Straight motor mounting

● EBS-05ME



Stroke code	0050	0100	0150	0200	0250	0300	0350	0400	0450	0500	0550	0600	0650	0700	0750	0800
Stroke length (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	Without brake	373	423	473	523	573	623	673	723	773	823	873	923	973	1023	1073
	With brake	443	493	543	593	643	693	743	793	843	893	943	993	1043	1093	1143
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
Weight (kg)	Without brake	2.8	2.9	3.1	3.2	3.4	3.5	3.7	3.8	4.0	4.1	4.2	4.4	4.5	4.7	5.0
	With brake	3.5	3.6	3.8	3.9	4.1	4.2	4.4	4.5	4.7	4.8	4.9	5.1	5.2	5.4	5.5

EBS
(With motor)

EBR
(With motor)

ECR
(Controller)

Safety
precautions



Electric actuator Slider

EBS-05M*

Motor mounting on side/bottom

□42 Stepper motor
with battery-less absolute encoder



How to order

EBS - **05** **M** **R** - **05** **0300** **N** **A** **N - C** **S03**

A Body size
05 Body width 54 mm

B Motor
M Yes

C Motor mounting direction
R Right-side mounting
D Bottom mounting
L Left-side mounting

E Stroke length
0050 to 0800
50 mm (In 50 mm increments)
800 mm

F Brake
N Without brake
B With brake

D Screw lead
02 2 mm
05 5 mm
10 10 mm
20 20 mm

G Encoder
A Battery-less absolute encoder

H Relay cable
*2 *3
N00 None
S01 Fixing cable 1 m
S03 Fixing cable 3 m
S05 Fixing cable 5 m
S10 Fixing cable 10 m
R01 Movable cable 1 m
R03 Movable cable 3 m
R05 Movable cable 5 m
R10 Movable cable 10 m

*1 Select "With brake" for vertical use.

*2 Select the controller from page 61.

*3 Refer to page 71 for relay cable dimensions.

Product subject to the EAR (EAR99)

Specifications

Motor	□42 Stepper motor				
Encoder type	Battery-less absolute encoder				
Drive method	Ball screw ø12				
Stroke length	mm	50 to 800			
Screw lead	mm	2	5	10	20
Max. load capacity	kg	45(45)	40(40)	35(35)	16.6(16.6)
*1 *2	Horizontal	24(24)	16.6(16.6)	8.3(8.3)	4.5(4.5)
	Vertical				
Operation speed range	mm/s	2 to 130 (70)	6 to 300 (250)	12 to 600 (500)	25 to 1100 (900)
*3 *4					
Maximum pressing force	N	385	250	121	44
Pressing operation speed range	mm/s	5 to 25	5 to 25	5 to 30	5 to 30
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% or 48 VDC ±10%			
Motor section max. instantaneous current	A	5.2			
Brake	Model, power supply voltage	Non-excitation operation, 24 VDC ±10%			
	Power consumption	7			
	Holding force	N	471	188	94
Insulation resistance		10 MΩ, 500 VDC			
Withstand voltage		500 VAC for 1 minute			
Operating ambient temperature, humidity		0 to 40°C (no freezing) 35 to 80% RH (no condensation)			
Storage ambient temperature, humidity		-10 to 50°C (no freezing) 35 to 80% RH (no condensation)			
Atmosphere		No corrosive gas, explosive gas, or dust			
Degree of protection		IP40			

*1 The values in () are at 24 VDC.

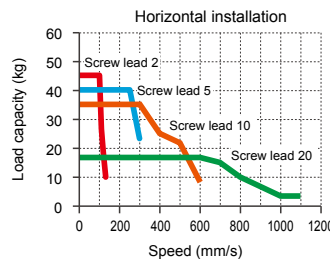
*2 Load capacity varies according to acceleration/deceleration and speed. Refer to page 28 for details.

*3 The maximum speed values in () are at 24 VDC.

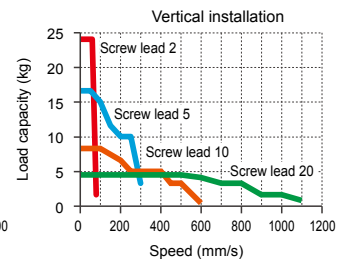
*4 The maximum speed may decrease depending on the conditions.

Speed and load capacity

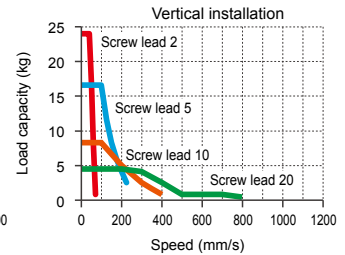
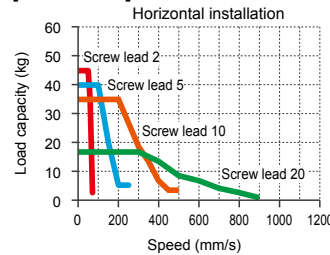
[At 48 VDC]



*Acceleration/deceleration 0.3 G



[At 24 VDC]



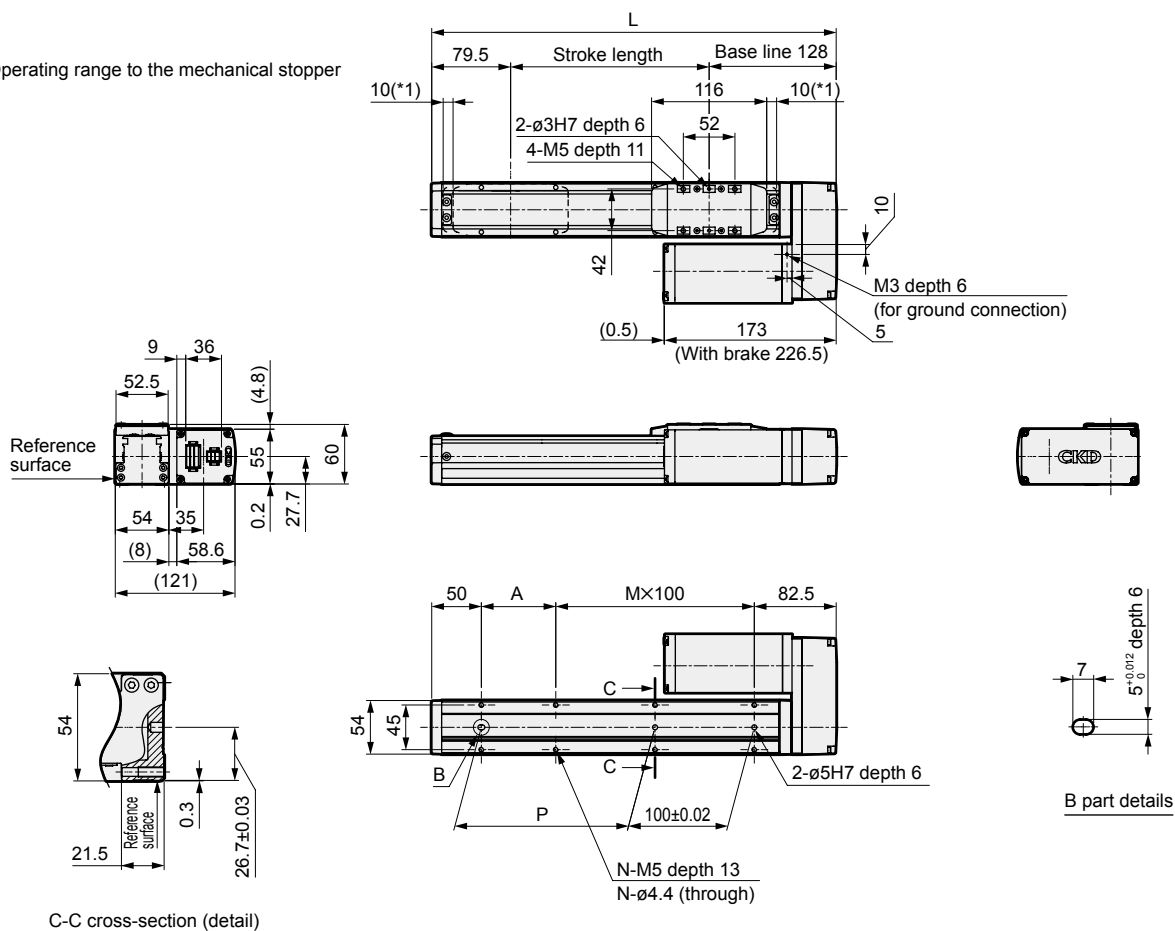
Stroke length and max. speed

Screw lead	Power supply voltage	Stroke (mm/s)						
		50 to 500	550	600	650	700	750	800
2	48 VDC	130	120	120	105	95	80	70
	24 VDC	70	70	70	70	70	70	70
5	48 VDC	300	300	300	270	235	200	185
	24 VDC	250	250	250	250	235	200	185
10	48 VDC	600	600	600	540	475	415	370
	24 VDC	500	500	500	500	475	415	370
20	48 VDC	1100	1100	1100	1080	950	830	740
	24 VDC	900	900	900	900	900	830	740

Dimensions Motor right-side mounting

● EBS-05MR

*1 Operating range to the mechanical stopper



C-C cross-section (detail)

Stroke code	0050	0100	0150	0200	0250	0300	0350	0400	0450	0500	0550	0600	0650	0700	0750	0800
Stroke length (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	257.5	307.5	357.5	407.5	457.5	507.5	557.5	607.5	657.5	707.5	757.5	807.5	857.5	907.5	957.5	1007.5
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
Weight (kg)	Without brake	2.7	2.8	3.0	3.1	3.4	3.5	3.6	3.8	3.9	4.0	4.2	4.3	4.5	4.6	5.1
	With brake	3.4	3.5	3.7	3.8	4.1	4.2	4.3	4.5	4.6	4.7	4.9	5.0	5.2	5.3	5.8

EBS
(With motor)

EBR
(With motor)

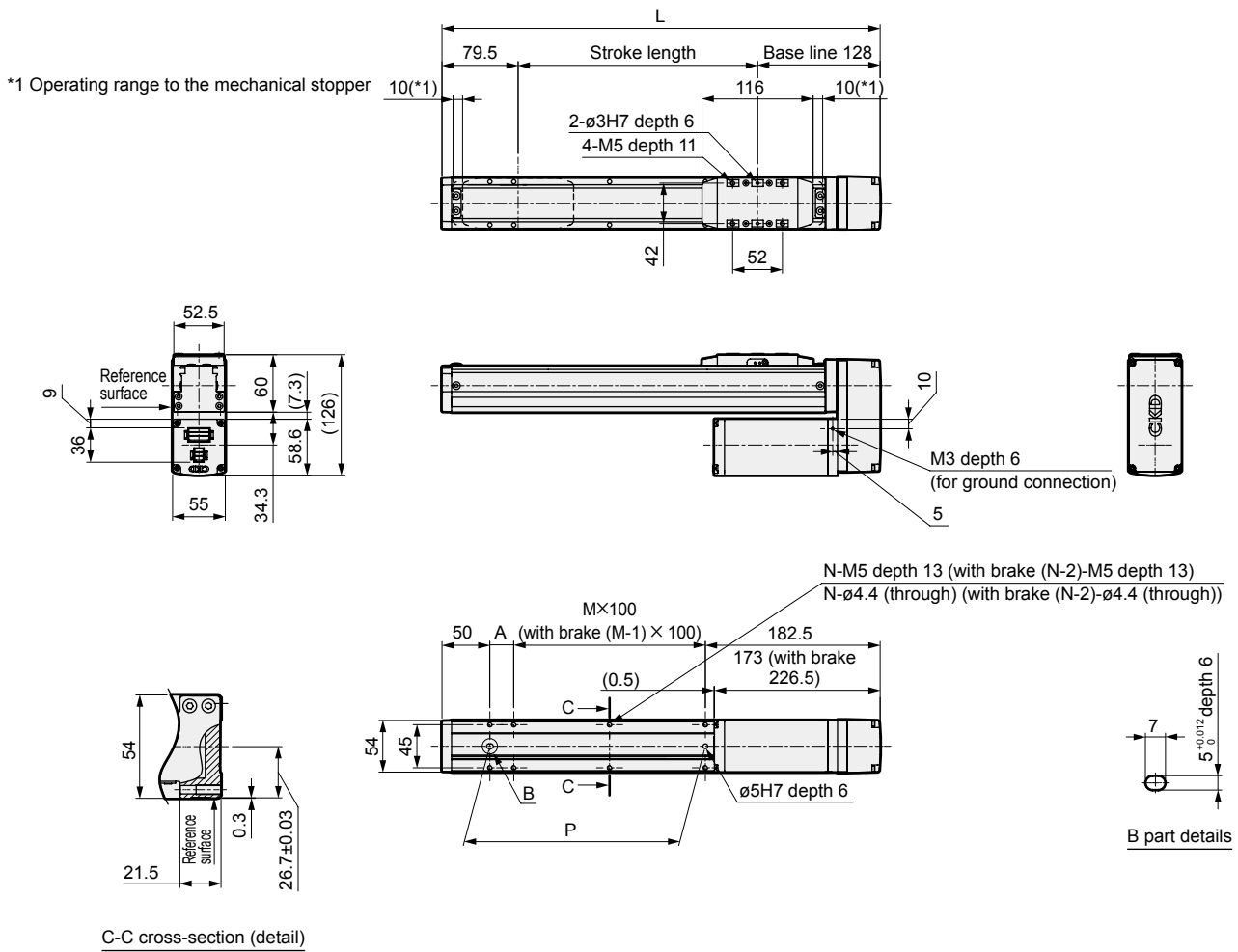
ECR
(Controller)

Safety
precautions

EBS-05M*

Dimensions Motor bottom mounting

● EBS-05MD

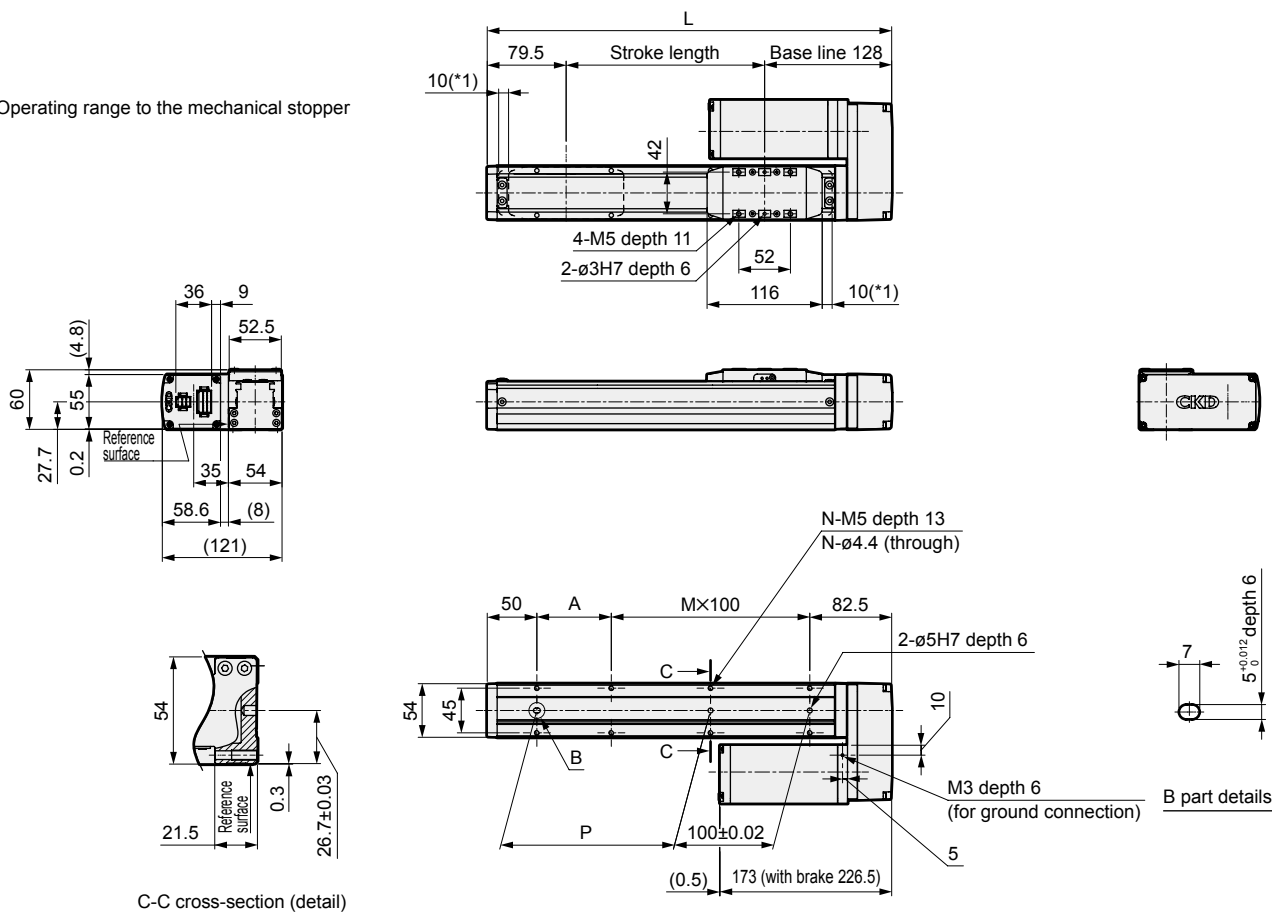


Stroke code	0250	0300	0350	0400	0450	0500	0550	0600	0650	0700	0750	0800
Stroke length (mm)	250	300	350	400	450	500	550	600	650	700	750	800
L	457.5	507.5	557.5	607.5	657.5	707.5	757.5	807.5	857.5	907.5	957.5	1007.5
A	25	75	25	75	25	75	25	75	25	75	25	75
M	2	2	3	3	4	4	5	5	6	6	7	7
N	8	8	10	10	12	12	14	14	16	16	18	18
P	225	275	325	375	425	475	525	575	625	675	725	775
Weight (kg)	Without brake	3.4	3.5	3.6	3.8	3.9	4.0	4.2	4.3	4.5	4.6	5.1
	With brake	4.1	4.2	4.3	4.5	4.6	4.7	4.9	5.0	5.2	5.3	5.8

Dimensions Motor left-side mounting

● EBS-05ML

*1 Operating range to the mechanical stopper



Stroke code	0050	0100	0150	0200	0250	0300	0350	0400	0450	0500	0550	0600	0650	0700	0750	0800
Stroke length (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	257.5	307.5	357.5	407.5	457.5	507.5	557.5	607.5	657.5	707.5	757.5	807.5	857.5	907.5	957.5	1007.5
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
Weight (kg)	Without brake	2.7	2.8	3.0	3.1	3.4	3.5	3.6	3.8	3.9	4.0	4.2	4.3	4.5	4.6	5.1
	With brake	3.4	3.5	3.7	3.8	4.1	4.2	4.3	4.5	4.6	4.7	4.9	5.0	5.2	5.3	5.8

EBS
(With motor)

EBR
(With motor)

ECR
(Controller)

Safety
precautions



Electric actuator Slider

EBS-08ME

Straight motor mounting

□ 56 Stepper motor
with battery-less absolute encoder



How to order

EBS - 08 M E - 05 0300 N A N - C S03									
A Body size		B Motor		C Motor mounting direction		D Screw lead		E Stroke length	
08 Body width 82 mm		M Yes		E Straight mounting		05 5 mm 10 10 mm 20 20 mm		0050 to 1100 50 mm (In 50 mm increments) 1100 mm	
								F Brake *1	
								N Without brake B With brake	
								G Encoder	
								A Battery-less absolute encoder	
								H Relay cable *2 *3	
								N00 None	
								S01 Fixing cable 1 m	
								S03 Fixing cable 3 m	
								S05 Fixing cable 5 m	
								S10 Fixing cable 10 m	
								R01 Movable cable 1 m	
								R03 Movable cable 3 m	
								R05 Movable cable 5 m	
								R10 Movable cable 10 m	

*1 Select "With brake" for vertical use.

*2 Select the controller from page 61.

*3 Refer to page 71 for relay cable dimensions.

Product subject to the EAR (EAR99)

Specifications

Motor	□ 56 Stepper motor		
Encoder type	Battery-less absolute encoder		
Drive method	Ball screw ø16		
Stroke length	mm	50 to 1100	
Screw lead	mm	5	10
Max. load capacity	kg	80(80)	70(70)
*1 *2	Horizontal	40(38.3)	18.3(18.3)
	Vertical	10(10)	10(10)
Operation speed range	mm/s	6 to 250	12 to 550
*3 *4		(150)	(300)
		25 to 1100	(600)
Maximum pressing force	N	970	477
Pressing operation speed range	mm/s	5 to 25	5 to 30
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% or 48 VDC ±10%	
Motor section max. instantaneous current	A	8.6	
Brake	Model, power supply voltage	Non-excitation operation, 24 VDC ±10%	
	Power consumption	W	
	Holding force	N	754
		377	188
Insulation resistance		10 MΩ, 500 VDC	
Withstand voltage		500 VAC for 1 minute	
Operating ambient temperature, humidity		0 to 40°C (no freezing) 35 to 80% RH (no condensation)	
Storage ambient temperature, humidity		-10 to 50°C (no freezing) 35 to 80% RH (no condensation)	
Atmosphere		No corrosive gas, explosive gas, or dust	
Degree of protection		IP40	

*1 The values in () are at 24 VDC.

*2 Load capacity varies according to acceleration/deceleration and speed. Refer to page 28 for details.

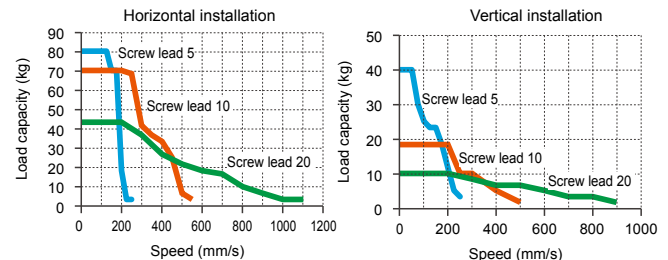
*3 The maximum speed values in () are at 24 VDC.

*4 The maximum speed may decrease depending on the conditions.

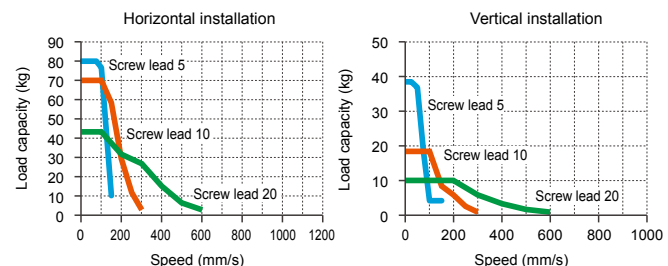
Speed and load capacity

[At 48 VDC]

*Acceleration/deceleration 0.3 G



[At 24 VDC]



Stroke length and max. speed

Screw lead	Power supply voltage	Stroke (mm/s)									
		50 to 600	650	700	750	800	850	900	950	1000	1050
5	48 VDC	250	250	250	250	220	200	180	135	120	110
	24 VDC	150	150	150	150	150	150	150	135	120	110
10	48 VDC	550	550	550	510	450	410	370	270	240	225
	24 VDC	300	300	300	300	300	300	270	240	225	200
20	48 VDC	1100	1000	1000	910	820	740	540	490	450	410
	24 VDC	600	600	600	600	600	600	540	490	450	410

Stroke code		0050	0100	0150	0200	0250	0300	0350	0400	0450	0500	0550	0600	0650	0700	0750	0800	0850	0900	0950	1000	1050	1100
Stroke length (mm)		50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
L	Without brake	446.5	496.5	546.5	596.5	646.5	696.5	746.5	796.5	846.5	896.5	946.5	996.5	1046.5	1096.5	1146.5	1196.5	1246.5	1296.5	1346.5	1396.5	1446.5	1496.5
	With brake	505.5	555.5	605.5	655.5	705.5	755.5	805.5	855.5	905.5	955.5	1005.5	1055.5	1105.5	1155.5	1205.5	1255.5	1305.5	1355.5	1405.5	1455.5	1505.5	1555.5
A		50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M		1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
N		6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
P		50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
Weight (kg)	Without brake	6.7	7.0	7.3	7.6	8.0	8.3	8.6	9.0	9.3	9.6	9.9	10.3	10.6	10.9	11.2	11.6	11.9	12.2	12.6	12.9	13.2	13.5
	With brake	8.0	8.3	8.6	8.9	9.3	9.6	9.9	10.3	10.6	10.9	11.2	11.6	11.9	12.2	12.5	12.9	13.2	13.5	13.9	14.2	14.5	14.8



Electric actuator Slider

EBS-08M*

Motor mounting on side/bottom

□ 56 Stepper motor
with battery-less absolute encoder



How to order

EBS - 08 M R - 05 0300 N A N - C S03

A Body size
08 Body width 82 mm

B Motor
M Yes

C Motor mounting direction
R Right-side mounting
D Bottom mounting
L Left-side mounting

D Screw lead
05 5 mm
10 10 mm
20 20 mm

E Stroke length
0050 to 1100 50 mm (In 50 mm increments) 1100 mm

F Brake *1
N Without brake
B With brake

G Encoder
A Battery-less absolute encoder

H Relay cable *2 *3

N00	None
S01	Fixing cable 1 m
S03	Fixing cable 3 m
S05	Fixing cable 5 m
S10	Fixing cable 10 m
R01	Movable cable 1 m
R03	Movable cable 3 m
R05	Movable cable 5 m
R10	Movable cable 10 m

*1 Select "With brake" for vertical use.

*2 Select the controller from page 61.

*3 Refer to page 71 for relay cable dimensions.

Product subject to the EAR (EAR99)

Specifications

Motor		□56 Stepper motor		
Encoder type		Battery-less absolute encoder		
Drive method		Ball screw ø16		
Stroke length	mm	50 to 1100		
Screw lead	mm	5	10	20
Max. load capacity	kg	80(80)	70(70)	43.3(43.3)
	Horizontal			
	Vertical	40(36.6)	18.3(16.6)	8.3(8.3)
Operation speed range	mm/s	6 to 225 (100)	12 to 550 (300)	25 to 1000 (500)
	*3 *4			
Maximum pressing force	N	970	477	250
Pressing operation speed range	mm/s	5 to 25	5 to 30	5 to 30
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% or 48 VDC ±10%		
Motor section max. instantaneous current		A 8.6		
Brake	Model, power supply voltage	Non-excitation operation, 24 VDC ±10%		
	Power consumption	W 8		
	Holding force	N 754	377	188
Insulation resistance		10 MΩ, 500 VDC		
Withstand voltage		500 VAC for 1 minute		
Operating ambient temperature, humidity		0 to 40 °C (no freezing) 35 to 80% RH (no condensation)		
Storage ambient temperature, humidity		-10 to 50 °C (no freezing) 35 to 80% RH (no condensation)		
Atmosphere		No corrosive gas, explosive gas, or dust		
Degree of protection		IP40		

*1 The values in () are at 24 VDC.

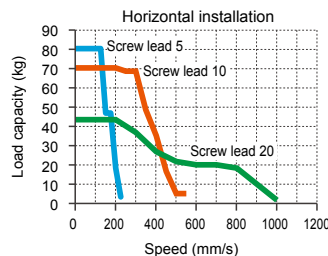
*2 Load capacity varies according to acceleration/deceleration and speed. Refer to page 28 for details.

*3 The maximum speed values in () are at 24 VDC.

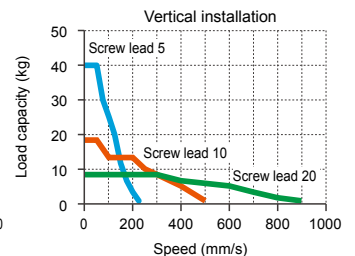
*4 The maximum speed may decrease depending on the conditions.

Speed and load capacity

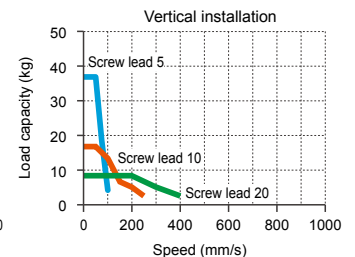
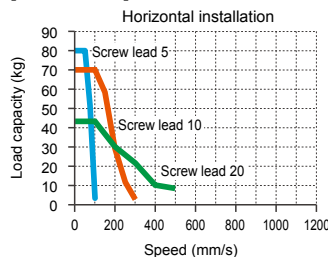
[At 48 VDC]



*Acceleration/deceleration 0.3 G



[At 24 VDC]



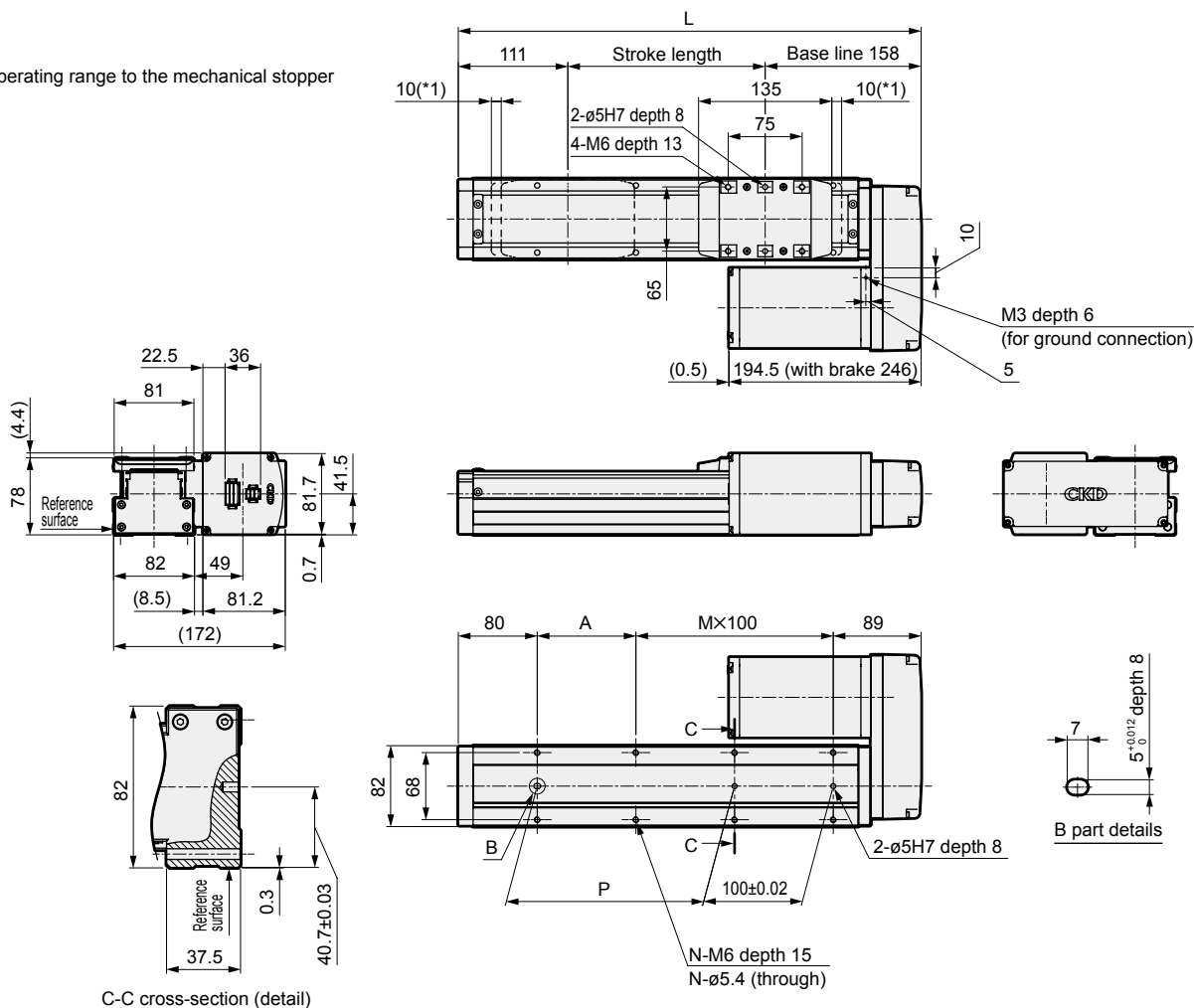
Stroke length and max. speed

Screw lead	Power supply voltage	Stroke (mm/s)								
		50 to 700	750	800	850	900	950	1000	1050	1100
5	48 VDC	225	225	220	200	180	135	120	110	100
	24 VDC	100	100	100	100	100	100	100	100	100
10	48 VDC	550	510	450	410	370	270	240	225	200
	24 VDC	300	300	300	300	300	270	240	225	200
20	48 VDC	1000	1000	910	820	740	540	490	450	410
	24 VDC	500	500	500	500	500	500	490	450	410

Dimensions Motor right-side mounting

● EBS-08MR

*1 Operating range to the mechanical stopper



Stroke code	0050	0100	0150	0200	0250	0300	0350	0400	0450	0500	0550	0600	0650	0700	0750	0800
Stroke length (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	319	369	419	469	519	569	619	669	719	769	819	869	919	969	1019	1069
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
Weight (kg)	Without brake	5.7	6.1	6.5	6.8	7.2	7.5	7.8	8.2	8.5	8.8	9.2	9.5	9.9	10.2	10.5
	With brake	7.0	7.4	7.8	8.1	8.5	8.8	9.1	9.5	9.8	10.1	10.5	10.8	11.2	11.5	11.8

Stroke code	0850	0900	0950	1000	1050	1100
Stroke length (mm)	850	900	950	1000	1050	1100
L	1119	1169	1219	1269	1319	1369
A	50	100	50	100	50	100
M	9	9	10	10	11	11
N	22	22	24	24	26	26
P	850	900	950	1000	1050	1100
Weight (kg)	Without brake	11.2	11.4	11.8	12.1	12.5
	With brake	12.5	12.7	13.1	13.4	13.8

EBS
(With motor)

EBR
(With motor)

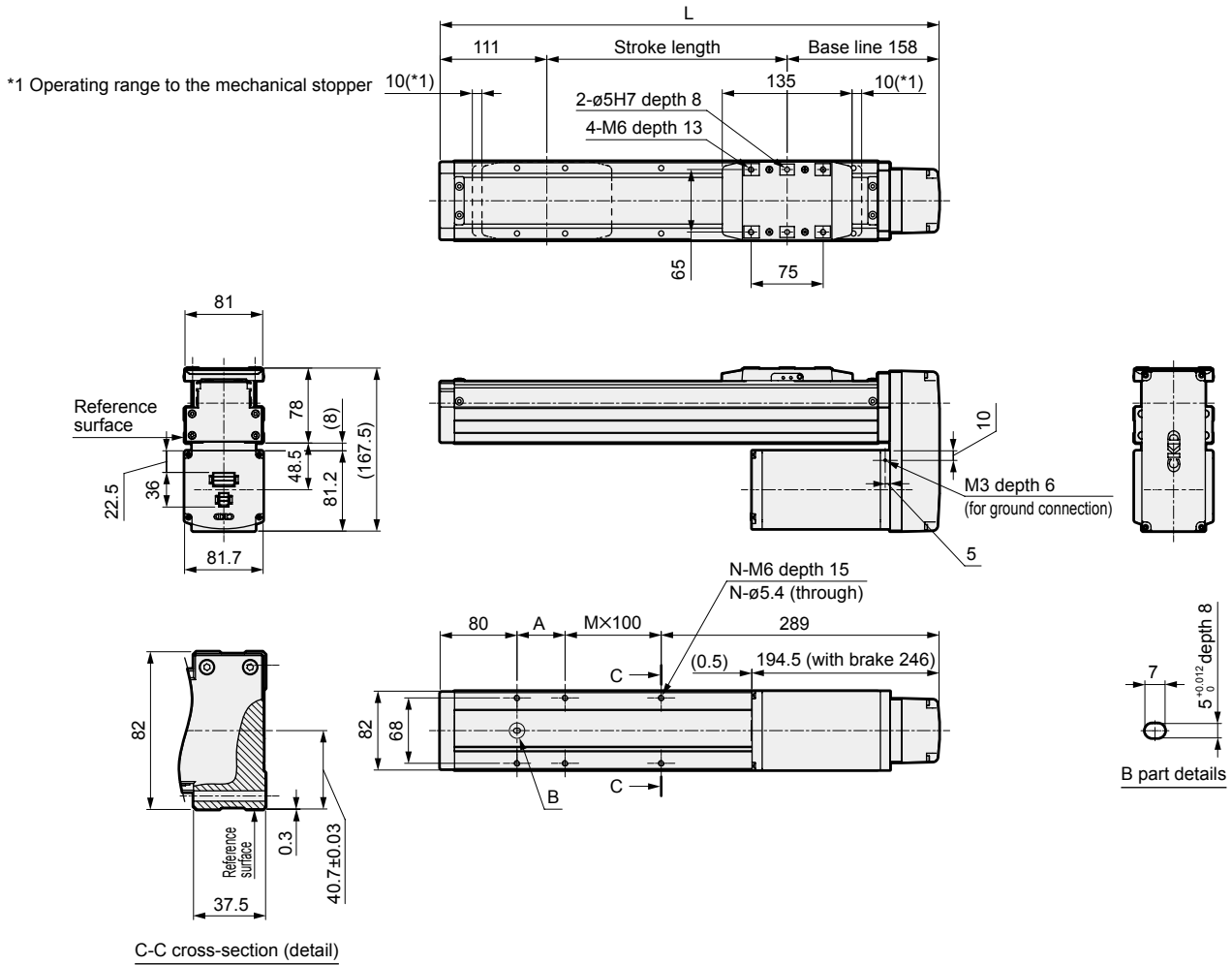
ECR
(Controller)

Safety
precautions

EBS-08M*

Dimensions Motor bottom mounting

● EBS-08MD



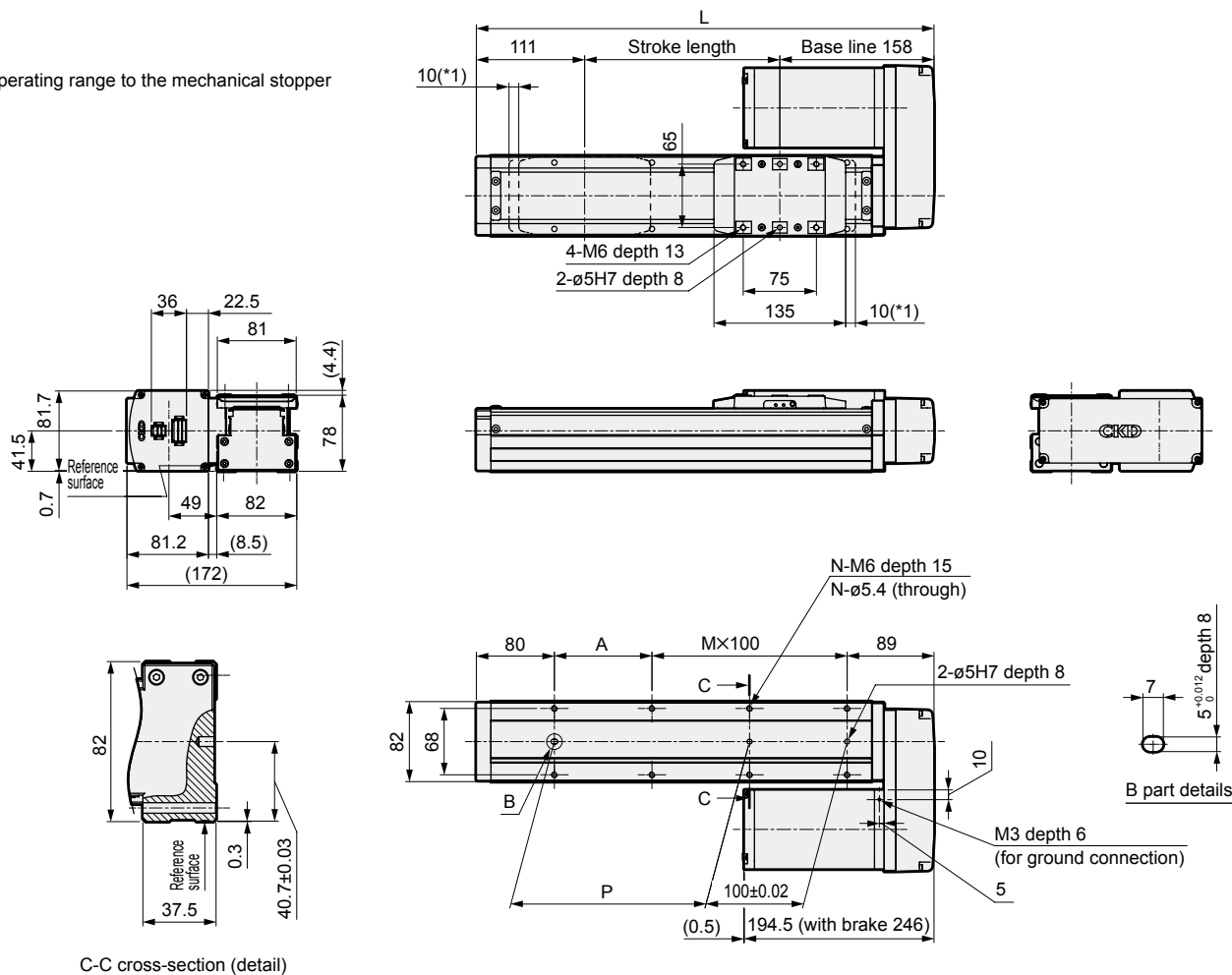
Stroke code	0250	0300	0350	0400	0450	0500	0550	0600	0650	0700	0750	0800	0850	0900	0950	1000
Stroke length (mm)	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
L	519	569	619	669	719	769	819	869	919	969	1019	1069	1119	1169	1219	1269
A	50	100	50	100	50	100	50	100	50	100	50	100	50	1169	50	100
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
Weight (kg)	Without brake	7.2	7.5	7.8	8.2	8.5	8.8	9.2	9.5	9.9	10.2	10.5	10.8	11.2	11.4	11.8
	With brake	8.5	8.8	9.1	9.5	9.8	10.1	10.5	10.8	11.2	11.5	11.8	12.1	12.5	12.7	13.1

Stroke code		1050	1100
Stroke length (mm)		1050	1100
L		1319	1369
A		50	100
M		9	9
N		22	22
Weight (kg)	Without brake	12.5	12.9
	With brake	13.8	14.2

Dimensions Motor left-side mounting

● EBS-08ML

*1 Operating range to the mechanical stopper



Stroke code	0050	0100	0150	0200	0250	0300	0350	0400	0450	0500	0550	0600	0650	0700	0750	0800
Stroke length (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	319	369	419	469	519	569	619	669	719	769	819	869	919	969	1019	1069
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
Weight (kg)	Without brake	5.7	6.1	6.5	6.8	7.2	7.5	7.8	8.2	8.5	8.8	9.2	9.5	9.9	10.2	10.5
	With brake	7.0	7.4	7.8	8.1	8.5	8.8	9.1	9.5	9.8	10.1	10.5	10.8	11.2	11.5	11.8

Stroke code		0850	0900	0950	1000	1050	1100
Stroke length (mm)		850	900	950	1000	1050	1100
L		1119	1169	1219	1269	1319	1369
A		50	100	50	100	50	100
M		9	9	10	10	11	11
N		22	22	24	24	26	26
P		850	900	950	1000	1050	1100
Weight (kg)	Without brake	11.2	11.4	11.8	12.1	12.5	12.9
	With brake	12.5	12.7	13.1	13.4	13.8	14.2

EBS
(With motor)

EBR
(With motor)

ECR
(Controller)

Safety
precautions