

# EBR-M/G

Electric actuator  
Motor specifications

Rod with built-in guide



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EBS  
(With motor)

EBR  
(With motor)

ECR  
(Controller)

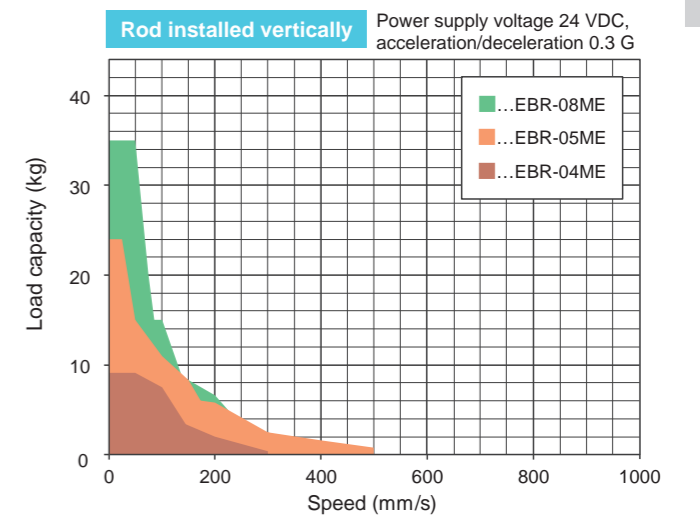
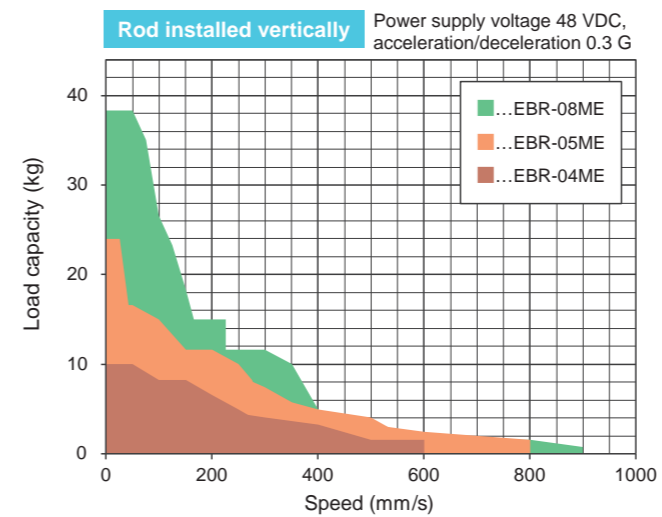
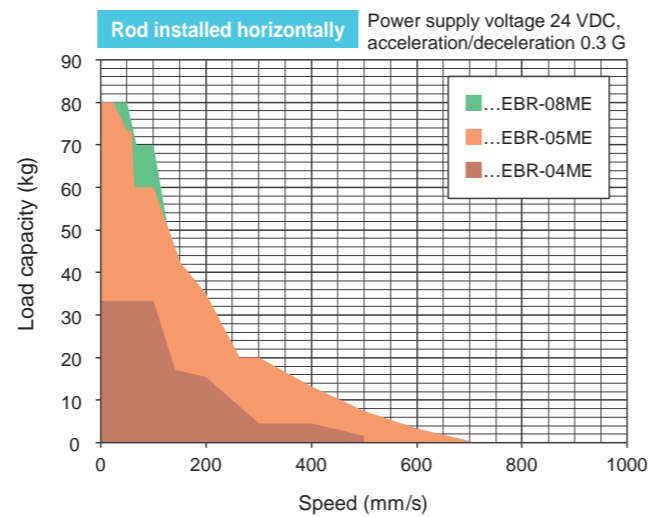
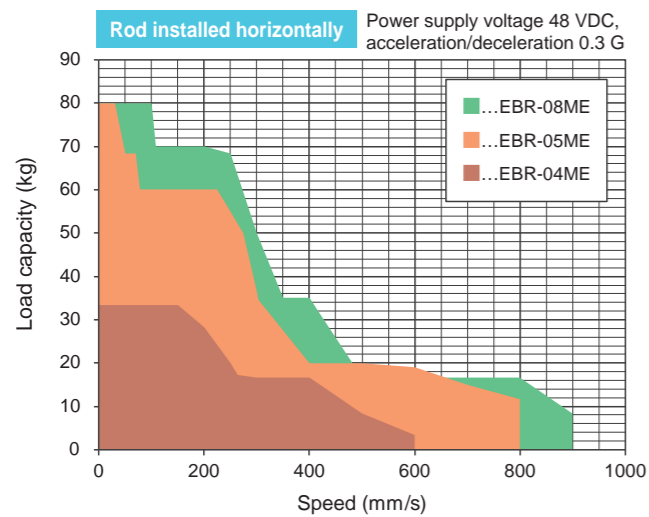
ECG-A  
(Controller)

Safety  
precautions




Series variation

Controller	Actuator model No.	Motor size	Motor mounting direction	Body width (mm)	Screw lead (mm)	Max. load capacity (kg)		Max. Pressing force (N)	Stroke (mm) and max. speed (mm/s)																Page												
						Horizontal	Vertical		50 mm	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800													
									350 mm/s		600		350		300		250		130		85		330			210		600		420		800		120		85	
EBS (With motor)	EBR-04ME-06	□35	Straight	44	6	33.3	10	131																	52												
	EBR-04ME-12				12	18.3	5	69																													
	EBR-04MR/D/L-06				Left/Right/Bottom	6	33.3	9.1	131																												
	EBR-04MR/D/L-12					12	18.3	5	69																												
EBR (With motor)	EBR-05ME-02	□42	Straight	54	2	80	24	397																	62												
	EBR-05ME-05				5	60	16.6	193																													
	EBR-05ME-10				10	50	10	94																													
	EBR-05ME-20				20	20	4.1	33																													
ECR (Controller)	EBR-05MR/D/L-02	□42	Left/Right/Bottom	54	2	80	24	397																	66												
	EBR-05MR/D/L-05				5	60	16.6	193																													
	EBR-05MR/D/L-10				10	36.6	8.3	94																													
	EBR-05MR/D/L-20				20	18.3	4.1	33																													
ECG-A (Controller)	EBR-08ME-05	□56	Straight	82	5	80	38.3	1050																	72												
	EBR-08ME-10				10	70	18.3	468																													
	EBR-08ME-20				20	35	11.6	213																													
	EBR-08MR/D/L-05		Left/Right/Bottom		5	80	38.3	1050																													
	EBR-08MR/D/L-10				10	70	18.3	468																													
	EBR-08MR/D/L-20				20	35	8.3	213																													

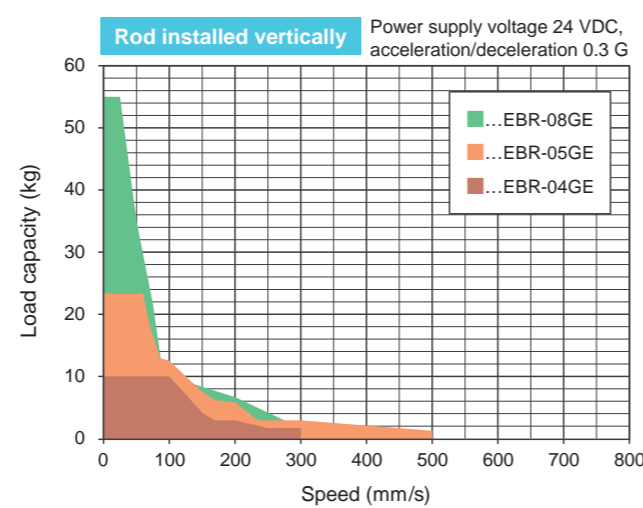
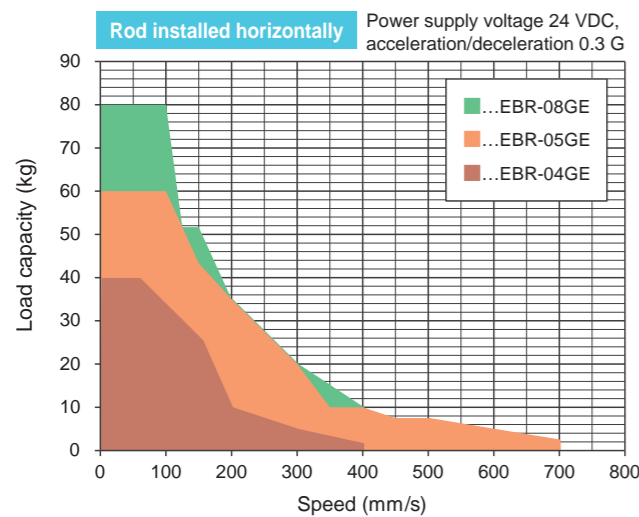
\* This data is at power supply voltage 48 VDC and acceleration/deceleration 0.3 G.  
\* The load capacity when wall mounted is the same as for horizontal installation.



Series variation

Controller	Actuator model No.	Motor size	Motor mounting direction	Body width (mm)	Screw lead (mm)	Max. load capacity (kg)		Max. Pressing force (N)	Stroke (mm) and max. speed (mm/s)																Page	
						Horizontal	Vertical		50 mm	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800		
									200 mm/s																	
EBS (With motor)		□35	Straight	44	6	40.0	10.0	155	200 mm/s																52	
					12	12.5	2.9	77	400																	
					Left/Right/Bottom	6	40.0	8.3	155	200																56
						12	12.5	2.9	77	350																
EBR (With motor)		□42	Straight	54	2	80.0	23.3	550	90			85													62	
					5	60.0	14.0	220	300			210														
					10	41.7	7.0	110	500			420														
					20	11.7	2.9	55	700																	
					Left/Right/Bottom	2	80.0	23.3	550	90			85													66
						5	60.0	14.0	220	250			210													
						10	38.3	6.7	110	400																
						20	11.7	1.7	55	600																
ECG Series		□56	Straight	82	5	80.0	55.0	965	125																72	
					10	70.0	23.3	482	300																	
					20	35.0	10.0	241	500																	
					Left/Right/Bottom	5	80.0	55.0	965	125																76
						10	70.0	20.0	482	250																
						20	35.0	8.3	241	400																

\* This data is at power supply voltage 24 VDC and acceleration/deceleration 0.3 G.  
\* The load capacity when wall mounted is the same as for horizontal installation.





Electric actuator Rod with built-in guide

# EBR-04\*E

Straight motor mounting

35 stepper motor



## How to order

**EBR** - **04** **M** **E** - **00** - **06** **0300** **N** **A** **N** - **C** **S03**

**A** Body size

<b>04</b>	Body width 44 mm
-----------	------------------

**E** Screw lead

<b>06</b>	6 mm
<b>12</b>	12 mm

**H** encoder \*1

<b>A</b>	Battery-less absolute encoder (for ECR)
<b>B</b>	Battery-less absolute encoder (for ECG)
<b>C</b>	Incremental encoder (for ECG)

**I** Relay cable \*3

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

**B** Applicable controller \*1

<b>M</b>	ECR
<b>G</b>	ECG

**C** Motor mounting direction

<b>E</b>	Straight mounting
----------	-------------------

**F** Stroke

<b>0050 to 0400</b>	50 mm (In 50 mm increments) 400 mm
---------------------	------------------------------------

**G** Brake \*2

<b>N</b>	None
<b>B</b>	Yes

**D** Mounting

<b>00</b>	Basic
<b>FA</b>	Rod side flange

\*1 Select the controller from page 93 or page 105.

Select encoder "A" when an ECR controller is selected and "B" or "C" when an ECG controller is selected.

\*2 Select "Yes" for vertical use.

\*3 Refer to page 103 for ECR and page 116 for ECG relay cable dimensions.

Product subject to the EAR (EAR99)

## Specifications

### [EBR-04M (applicable controller ECR)]

Motor	<input type="checkbox"/> 35 stepper motor	
Encoder type	Battery-less absolute encoder	
Drive method	Ball screw $\varnothing$ 10	
Stroke length mm	50 to 400	
Screw lead mm	6	12
Max. load capacity kg	Horizontal	Vertical
*1 *2	33.3 (33.3)	18.3 (18.3)
	10 (9.1)	5 (4.5)
Operation speed range*3 4 mm/s	7 to 350 (250)	15 to 600 (500)
Maximum pressing force N	131	69
Press operation speed range mm/s	5 to 20	5 to 30
Repeatability mm	$\pm$ 0.01	
Lost motion mm	0.1 or less	
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

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

\*2 Load capacity varies according to acceleration/deceleration and speed. Refer to page 88 for details.

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

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

### [EBR-04G (applicable controller ECG)]

Motor	<input type="checkbox"/> 35 stepper motor	
Encoder type	Battery-less absolute encoder Incremental encoder	
Drive method	Ball screw $\varnothing$ 10	
Stroke length mm	50 to 400	
Screw lead mm	6	12
Max. load capacity kg	Horizontal	Vertical
*1	40.0	12.5
	10.0	2.9
Operation speed range*2 mm/s	7 to 200	15 to 400
Maximum pressing force N	155	77
Press operation speed range mm/s	5 to 20	5 to 20
Repeatability mm	$\pm$ 0.01	
Lost motion mm	0.1 or less	
Motor power supply voltage	24 VDC $\pm$ 10%	
Motor section max. instantaneous current A	2.4	
Brake	Model, power supply voltage	Non-excitation operation, 24 VDC $\pm$ 10%
	Power consumption W	6.1
	Holding force N	140
		70

\*1 Load capacity varies according to acceleration/deceleration and speed.

Refer to page 90 for details.

\*2 The maximum speed may decrease depending on the conditions.

### [Common specifications]

Insulation resistance	10M $\Omega$ , 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

\*The operating ambient temperature of EBR-\*\*G is 10°C to 40°C.

## Stroke and max. speed

[EBR-04M (applicable controller ECR)]

(mm/s)

Screw lead	Power supply voltage	Stroke length				
		50 to 200	250	300	350	400
6	48 VDC	350	300	250	250	250
	24 VDC	250	250	250	250	250
12	48 VDC	600	600	490	490	490
	24 VDC	500	500	490	490	490

[EBR-04G (applicable controller ECG)]

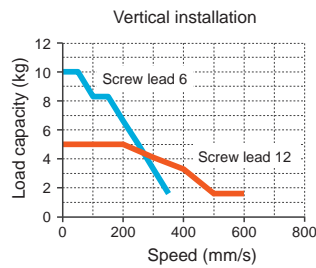
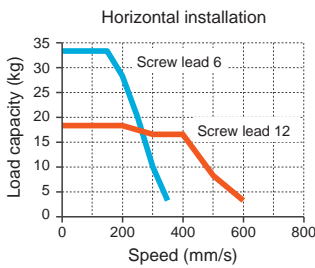
(mm/s)

Screw lead	Power supply voltage	Stroke length
		50 to 400
6	24 VDC	200
12	24 VDC	400

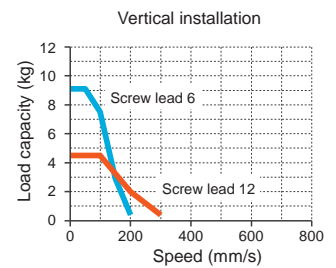
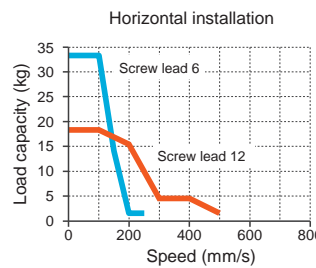
## Speed and load capacity

[EBR-04M (applicable controller ECR)]

· At 48 VDC

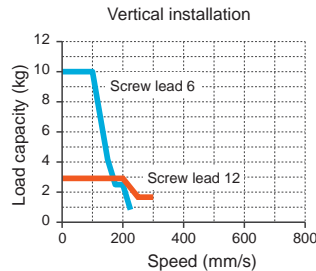
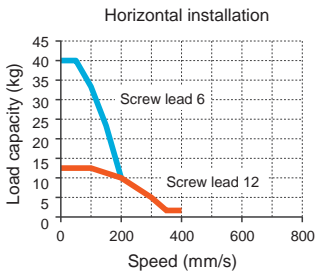


· At 24 VDC



[EBR-04G (applicable controller ECG)]

· At 24 VDC



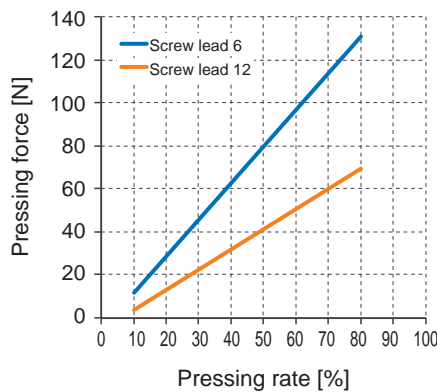
\* Incorrectly applying a 48 VDC power supply could result in damage.

\* At acceleration of 0.3 G.

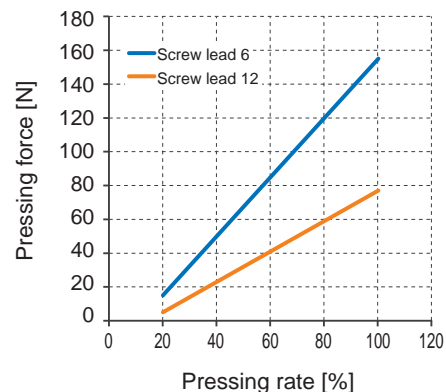
\* Confirm each of the pages listed below for details.  
 ECR: Page 88  
 ECG: Page 90

## Pressing force

[EBR-04M (applicable controller ECR)]



[EBR-04G (applicable controller ECG)]



\* The above pressing force is a reference value. Variation may occur according to conditions such as pressing speed.

EBS  
 (With motor)  
 EBR  
 (With motor)  
 ECR  
 (Controller)  
 ECG-A  
 (Controller)

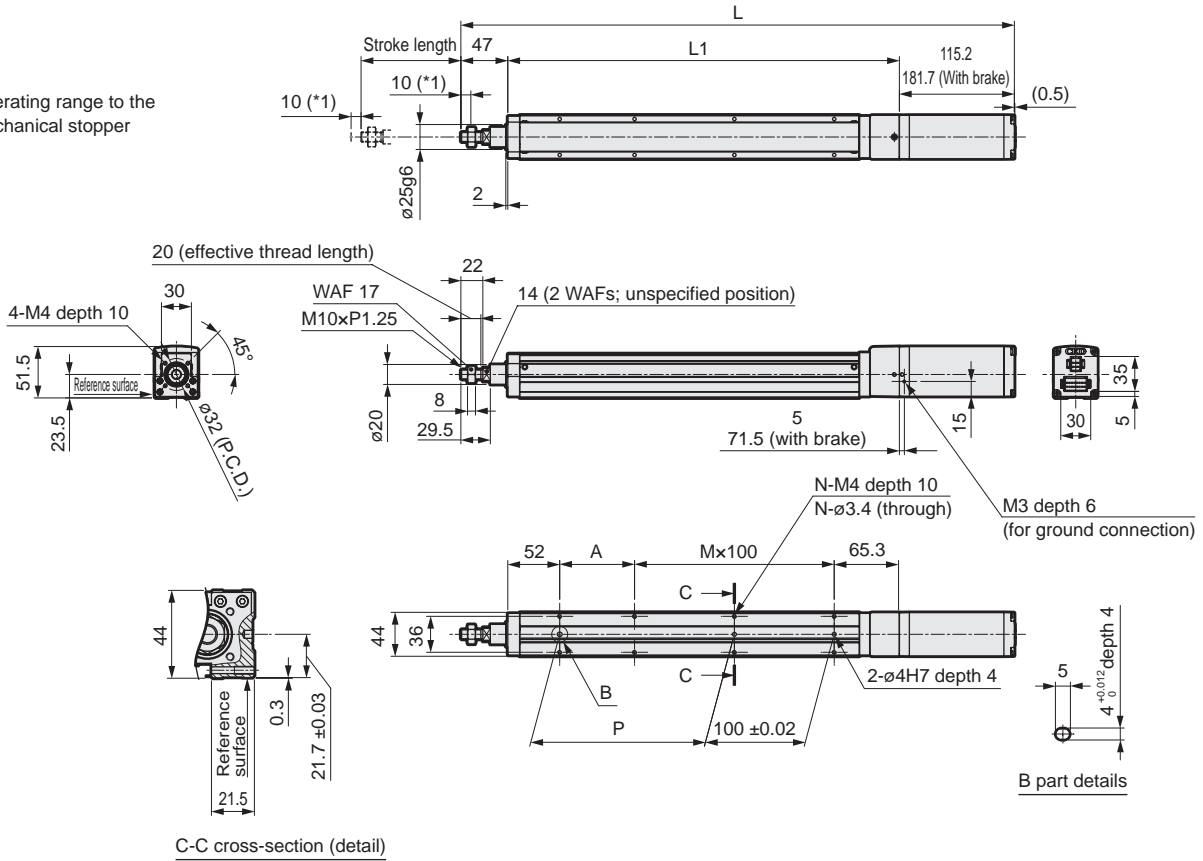
Safety  
 precautions

# EBR-04\*E

Dimensions: Straight motor mounting

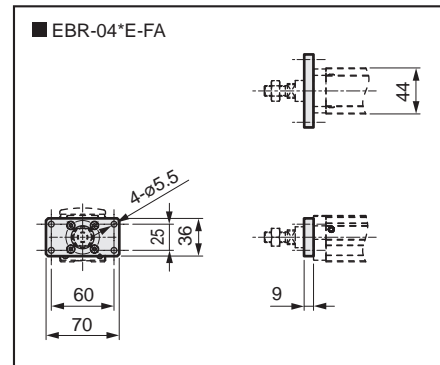
## EBR-04\*E

\*1 Operating range to the mechanical stopper



C-C cross-section (detail)

Stroke code	0050	0100	0150	0200	0250	0300	0350	0400	
Stroke length (mm)	50	100	150	200	250	300	350	400	
L	Without brake	404.5	454.5	504.5	554.5	604.5	654.5	704.5	754.5
	With brake	471	521	571	621	671	721	771	821
L1	242.3	292.3	342.3	392.3	442.3	492.3	542.3	592.3	
A	25	75	25	75	25	75	25	75	
M	1	1	2	2	3	3	4	4	
N	6	6	8	8	10	10	12	12	
P	25	75	125	175	225	275	325	375	
Weight (kg)	Without brake	1.6	1.8	1.9	2.1	2.2	2.4	2.5	2.7
	With brake	2.1	2.3	2.4	2.6	2.7	2.9	3.0	3.2



EBS  
(With motor)

EBR  
(With motor)

ECR  
(Controller)

ECG-A  
(Controller)

Safety  
precautions

Notes

EBS  
(With motor)

EBR  
(With motor)

ECR  
(Controller)

ECG-A  
(Controller)

Safety  
precautions



Electric actuator Rod with built-in guide

# EBR-04\*\*

Motor side mounting (left, right, bottom)

35 stepper motor



## How to order

**EBR - 04 M R - 00 - 06 0300 N A N - C S03**

**A Body size**

<b>04</b>	Body width 44 mm
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**B Applicable controller \*1**

<b>M</b>	ECR
<b>G</b>	ECG

**C Motor mounting direction \*2**

<b>R</b>	Right mounting
<b>D</b>	Bottom mounting
<b>L</b>	Left mounting

**E Screw lead**

<b>06</b>	6 mm
<b>12</b>	12 mm

**F Stroke \*2**

<b>0050 to 0400</b>	50 mm (In 50 mm increments) 400 mm
---------------------	------------------------------------

**D Mounting**

<b>00</b>	Basic
<b>FA</b>	Rod side flange

**G Brake \*3**

<b>N</b>	None
<b>B</b>	Yes

**H Encoder**

<b>A</b>	Battery-less absolute encoder (for ECR)
<b>B</b>	Battery-less absolute encoder (for ECG)
<b>C</b>	Incremental encoder (for ECG)

**I Relay cable \*4**

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

\*1 Select the controller from page 93 or page 105.

Select encoder "A" when an ECR controller is selected and "B" or "C" when an ECG controller is selected.

\*2 If "D" is selected for the motor mounting direction, select a stroke length from "0250 (250 mm)" to "0400 (400 mm)".

\*3 Select "Yes" for vertical use.

\*4 Refer to page 103 for ECR and page 116 for ECG relay cable dimensions.

Product subject to the EAR (EAR99)

## Specifications

[EBR-04M (applicable controller ECR)]

Motor	<input type="checkbox"/> 35 stepper motor	
Encoder type	Battery-less absolute encoder	
Drive method	Ball screw $\phi$ 10	
Stroke length mm	50 to 400	
Screw lead mm	6	12
Max. load capacity kg	Horizontal	Vertical
*1 *2	33.3 (33.3)	18.3 (18.3)
	9.1 (9.1)	5 (4.5)
Operation speed range *3 4 mm/s	7 to 350 (200)	15 to 600 (400)
Maximum pressing force N	131	69
Press operation speed range mm/s	5 to 20	5 to 30
Repeatability mm	$\pm 0.01$	
Lost motion mm	0.1 or less	
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

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

\*2 Load capacity varies according to acceleration/deceleration and speed. Refer to page 88 for details.

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

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

[EBR-04G (applicable controller ECG)]

Motor	<input type="checkbox"/> 35 stepper motor	
Encoder type	Battery-less absolute encoder Incremental encoder	
Drive method	Ball screw $\phi$ 10	
Stroke length mm	50 to 400	
Screw lead mm	6	12
Max. load capacity kg	Horizontal	Vertical
*1	40.0	12.5
	8.3	2.9
Operation speed range *2 mm/s	7 to 200	15 to 350
Maximum pressing force N	155	77
Press operation speed range mm/s	5 to 20	5 to 20
Repeatability mm	$\pm 0.01$	
Lost motion mm	0.1 or less	
Motor power supply voltage	24 VDC $\pm 10\%$	
Motor section max. instantaneous current A	2.4	
Brake	Model, power supply voltage	Non-excitation operation, 24 VDC $\pm 10\%$
	Power consumption W	6.1
	Holding force N	140

\*1 Load capacity varies according to acceleration/deceleration and speed. Refer to page 90 for details.

\*2 The maximum speed may decrease depending on the conditions.

[Common specifications]

Insulation resistance	10M $\Omega$ , 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

\* The operating ambient temperature of EBR-\*\*G is 10°C to 40°C.

## Stroke and max. speed

[EBR-04M (applicable controller ECR)]

(mm/s)

Screw lead	Power supply voltage	Stroke length				
		50 to 200	250	300	350	400
6	48 VDC	350	300	250	250	250
	24 VDC	200	200	200	200	200
12	48 VDC	600	600	490	490	490
	24 VDC	400	400	400	400	400

[EBR-04G (applicable controller ECG)]

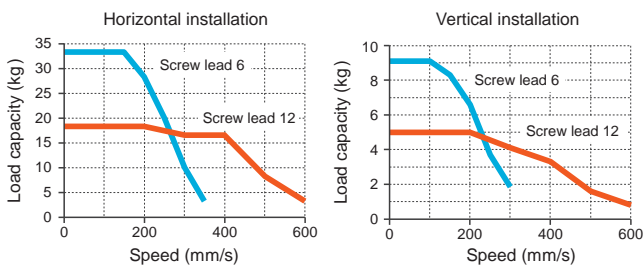
(mm/s)

Screw lead	Power supply voltage	Stroke length
		50 to 400
6	24 VDC	200
12	24 VDC	350

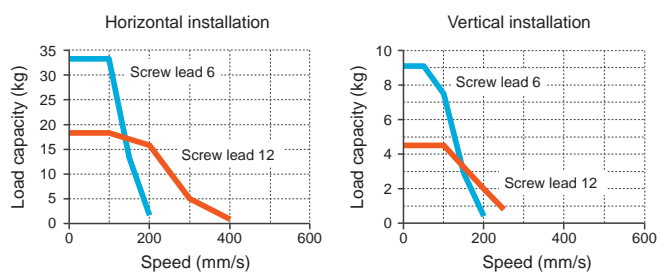
## Speed and load capacity

[EBR-04M (applicable controller ECR)]

· At 48 VDC

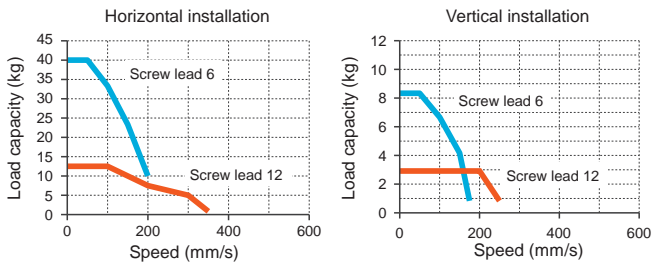


· At 24 VDC



[EBR-04G (applicable controller ECG)]

· At 24 VDC



\* Incorrectly applying a 48 VDC power supply could result in damage.

\* At acceleration of 0.3 G.

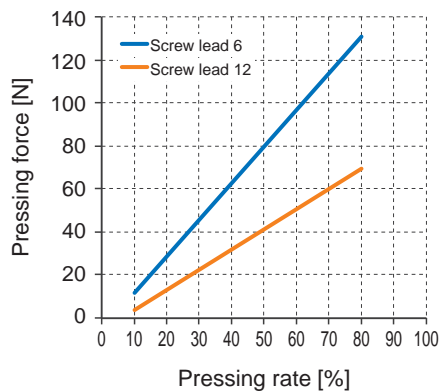
\* Confirm each of the pages listed below for details.

ECR: Page 88

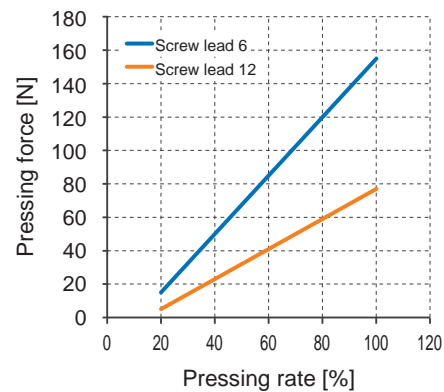
ECG: Page 90

## Pressing force

[EBR-04M (applicable controller ECR)]



[EBR-04G (applicable controller ECG)]



\* The above pressing force is a reference value. Variation may occur according to conditions such as pressing speed.

EBS  
(With motor)

EBR  
(With motor)

ECR  
(Controller)

ECG-A  
(Controller)

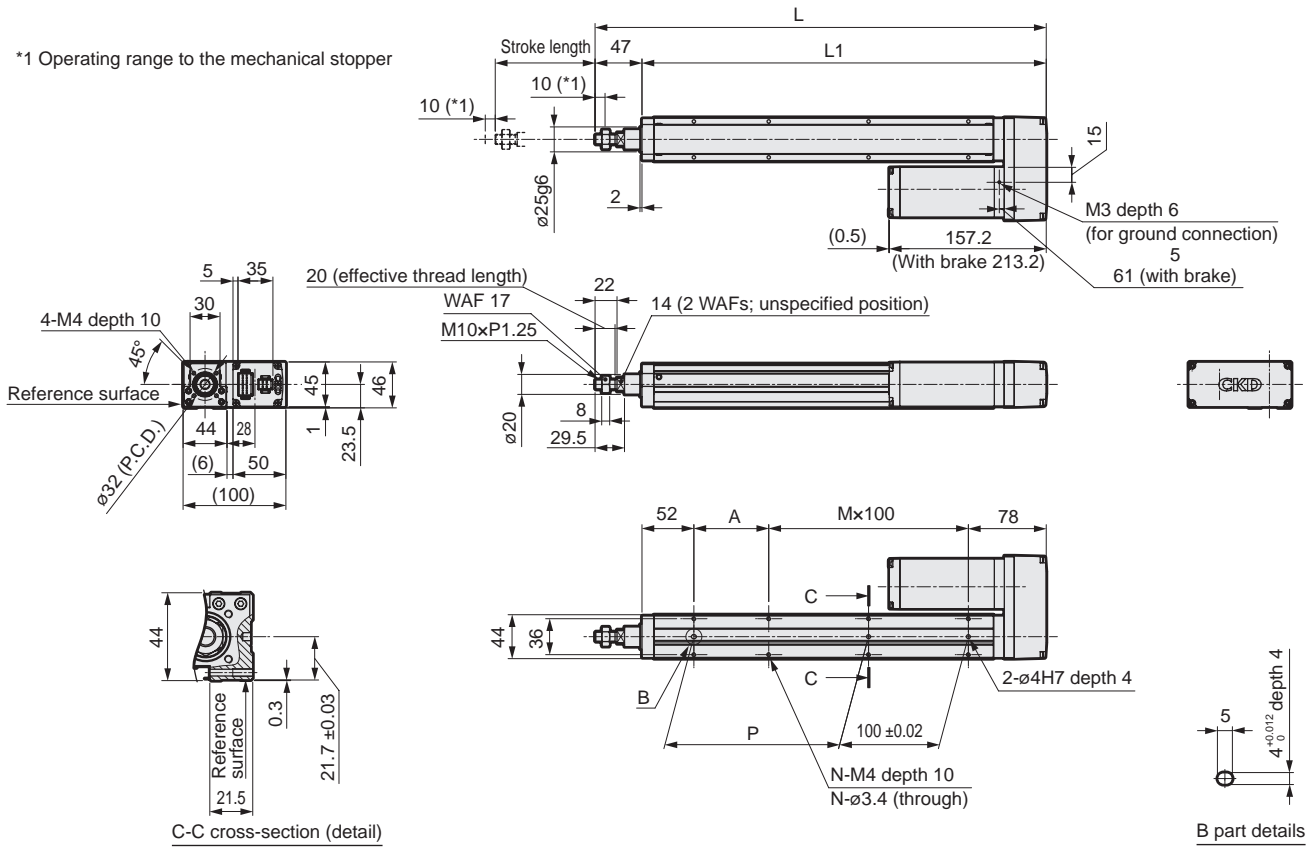
Safety  
precautions

# EBR-04\*\*

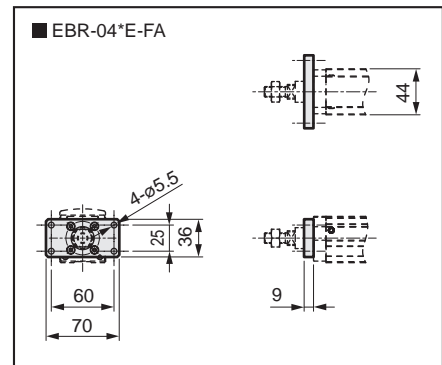
Dimensions: Motor right-side mounting

## EBR-04\*R

\*1 Operating range to the mechanical stopper



Stroke code	0050	0100	0150	0200	0250	0300	0350	0400	
Stroke length (mm)	50	100	150	200	250	300	350	400	
L	302	352	402	452	502	552	602	652	
L1	255	305	355	405	455	505	555	605	
A	25	75	25	75	25	75	25	75	
M	1	1	2	2	3	3	4	4	
N	6	6	8	8	10	10	12	12	
P	25	75	125	175	225	275	325	375	
Weight (kg)	Without brake	1.6	1.8	1.9	2.1	2.3	2.5	2.6	2.8
	With brake	2.1	2.3	2.4	2.6	2.8	3.0	3.1	3.3



EBR  
(With motor)

EBR  
(With motor)

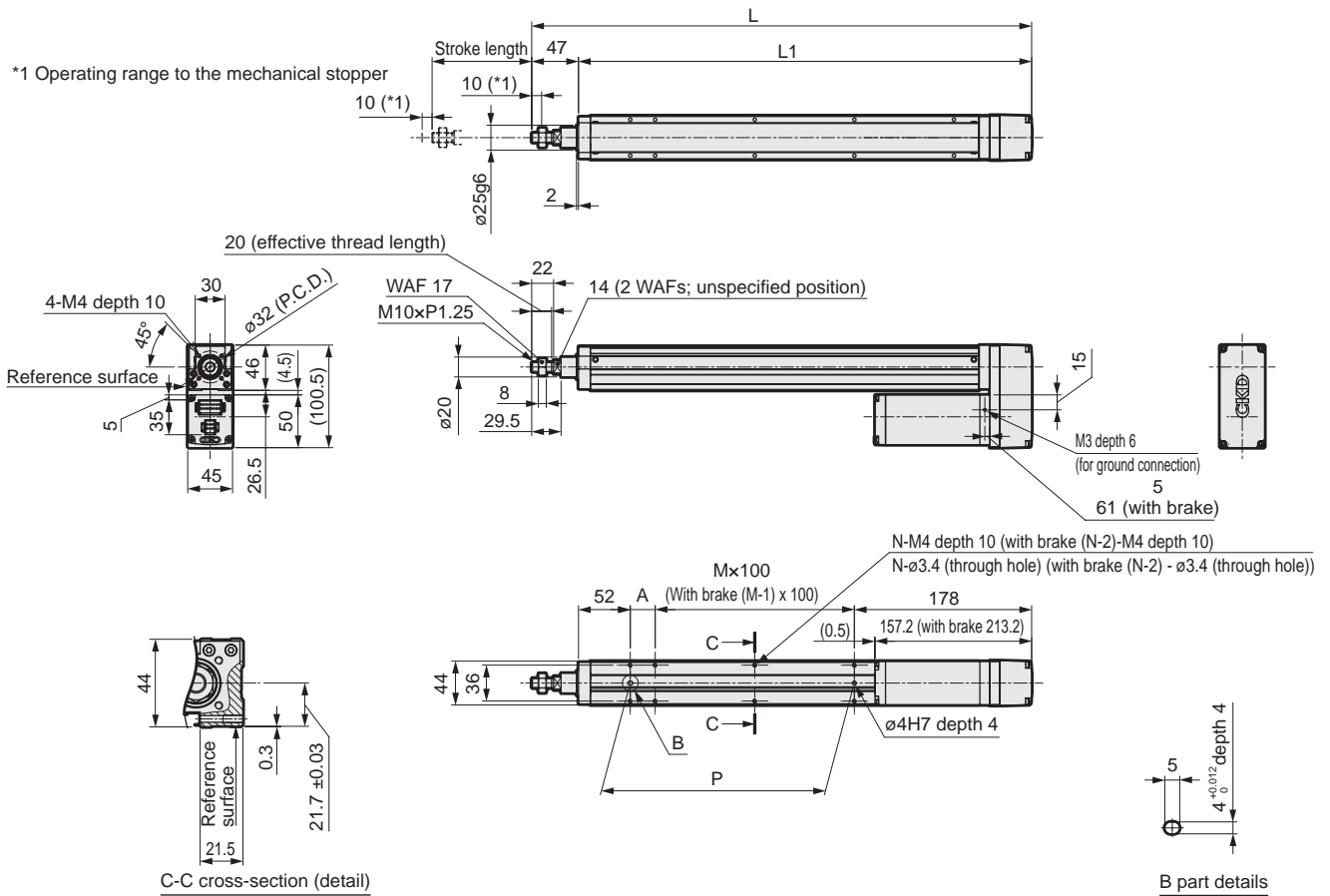
ECR  
(Controller)

ECG-A  
(Controller)

Safety  
precautions

Dimensions: Motor bottom mounting

● EBR-04\*D



Stroke code	0250	0300	0350	0400	
Stroke length (mm)	250	300	350	400	
L	502	552	602	652	
L1	455	505	555	605	
A	25	75	25	75	
M	2	2	3	3	
N	8	8	10	10	
P	225	275	325	375	
Weight (kg)	Without brake	2.3	2.5	2.6	2.8
	With brake	2.8	3.0	3.1	3.3

EBS  
(With motor)

EBR  
(With motor)

ECR  
(Controller)

ECG-A  
(Controller)

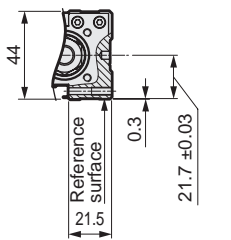
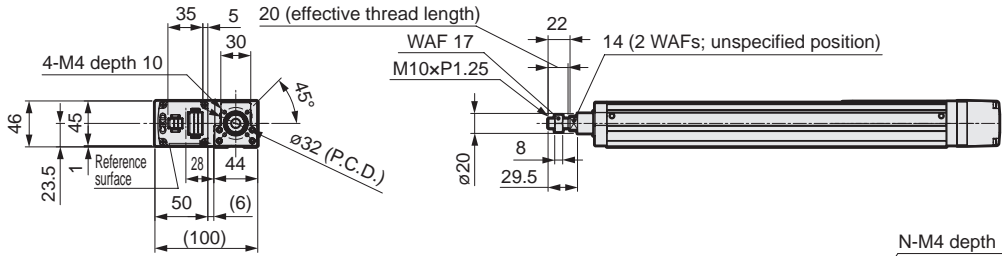
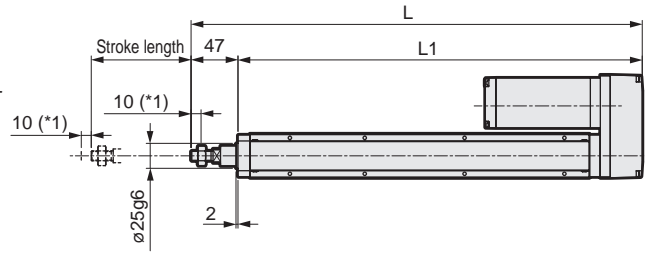
Safety  
precautions

# EBR-04\*\*

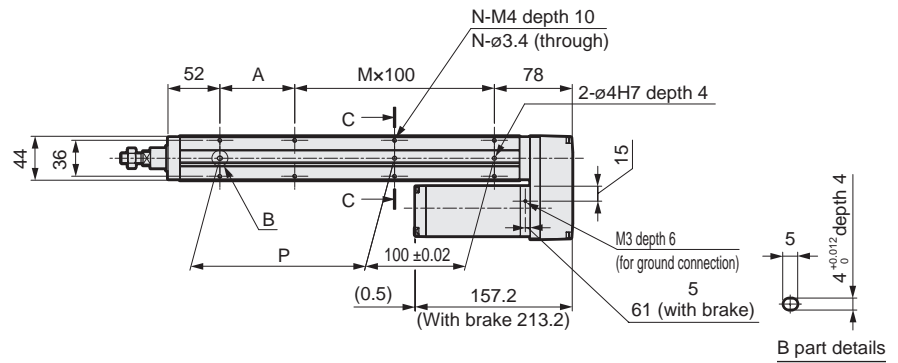
Dimensions: Motor left-side mounting

## ● EBR-04\*L

\*1 Operating range to the mechanical stopper



C-C cross-section (detail)



B part details

Stroke code	0050	0100	0150	0200	0250	0300	0350	0400
Stroke length (mm)	50	100	150	200	250	300	350	400
L	302	352	402	452	502	552	602	652
L1	255	305	355	405	455	505	555	605
A	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4
N	6	6	8	8	10	10	12	12
P	25	75	125	175	225	275	325	375
Weight (kg)	Without brake	1.6	1.8	1.9	2.1	2.3	2.6	2.8
	With brake	2.1	2.3	2.4	2.6	2.8	3.0	3.3

Safety precautions

Notes

EBS  
(With motor)

**EBR**  
(With motor)

ECR  
(Controller)

ECG-A  
(Controller)

Safety  
precautions



Electric actuator Rod with built-in guide

# EBR-05\*E

Straight motor mounting

42 Stepper motor



## How to order

**EBR** - **05** **M** **E** - **00** - **05** **0300** **N** **A** **N** - **C** **S03**

**A** Body size

<b>05</b>	Body width 54 mm
-----------	------------------

**B** Applicable controller \*1

<b>M</b>	ECR
<b>G</b>	ECG

**C** Motor mounting direction

<b>E</b>	Straight mounting
----------	-------------------

**D** Mounting

<b>00</b>	Basic
<b>FA</b>	Rod side flange

**E** Screw lead

<b>02</b>	2 mm
<b>05</b>	5 mm
<b>10</b>	10 mm
<b>20</b>	20 mm

**F** Stroke

<b>0050 to 0400</b>	50 mm (In 50 mm increments) 400 mm
---------------------	------------------------------------

**H** encoder \*1

<b>A</b>	Battery-less absolute encoder (for ECR)
<b>B</b>	Battery-less absolute encoder (for ECG)
<b>C</b>	Incremental encoder (for ECG)

**G** Brake \*2

<b>N</b>	None
<b>B</b>	Yes

**I** Relay cable \*3

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

\*1 Select the controller from page 93 or page 105.

Select encoder "A" when an ECR controller is selected and "B" or "C" when an ECG controller is selected.

\*2 Select "Yes" for vertical use.

\*3 Refer to page 103 for ECR and page 116 for ECG relay cable dimensions.

Product subject to the EAR (EAR99)

## Specifications

[EBR-05M (applicable controller ECR)]

Motor	<input type="checkbox"/> 42 Stepper motor				
Encoder type	Battery-less absolute encoder				
Drive method	Ball screw $\phi$ 12				
Stroke length mm	50 to 400				
Screw lead mm	2	5	10	20	
Max. load capacity kg	Horizontal	80 (80)	60 (60)	50 (50)	20 (20)
	Vertical	24 (24)	16.6 (15)	10 (6.6)	4.1 (4.1)
Operation speed range	mm/s	2 to 130 (80)	6 to 330 (275)	12 to 600 (500)	25 to 800 (700)
Maximum pressing force N		397	193	94	33
Press operation speed range mm/s		5 to 20	5 to 20	5 to 30	5 to 30
Repeatability mm		$\pm 0.01$			
Lost motion mm		0.1 or less			
Motor power supply voltage		24 VDC $\pm 10\%$ or 48 VDC $\pm 10\%$			
Motor section max. instantaneous current A		5.2			
Brake	Model, power supply voltage	Non-excitation operation, 24 VDC $\pm 10\%$			
	Power consumption W	7			
	Holding force N	471	188	94	47

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

\*2 Load capacity varies according to acceleration/deceleration and speed. Refer to page 88 for details.

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

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

[EBR-05G (applicable controller ECG)]

Motor	<input type="checkbox"/> 42 Stepper motor				
Encoder type	Battery-less absolute encoder Incremental encoder				
Drive method	Ball screw $\phi$ 12				
Stroke length mm	50 to 400				
Screw lead mm	2	5	10	20	
Max. load capacity kg	Horizontal	80.0	60.0	41.7	11.7
	Vertical	23.3	14.0	7.0	2.9
Operation speed range	mm/s	2 to 90	6 to 300	12 to 500	25 to 700
Maximum pressing force N		550	220	110	55
Press operation speed range mm/s		5 to 20	5 to 20	5 to 20	5 to 20
Repeatability mm		$\pm 0.01$			
Lost motion mm		0.1 or less			
Motor power supply voltage		24 VDC $\pm 10\%$			
Motor section max. instantaneous current A		2.7			
Brake	Model, power supply voltage	Non-excitation operation, 24 VDC $\pm 10\%$			
	Power consumption W	6.1			
	Holding force N	420	168	84	42

\*1 Load capacity varies according to acceleration/deceleration and speed. Refer to page 90 for details.

\*2 The maximum speed may decrease depending on the conditions.

[Common specifications]

Insulation resistance	10M $\Omega$ , 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

\*The operating ambient temperature of EBR-\*\*G is 10°C to 40°C.

## Stroke and max. speed

[EBR-05M (applicable controller ECR)]

(mm/s)

Thread lead	Power supply voltage	Stroke length			
		50 to 250	300	350	400
2	48 VDC	130	85	85	85
	24 VDC	80	80	80	80
5	48 VDC	330	210	210	210
	24 VDC	275	210	210	210
10	48 VDC	600	420	420	420
	24 VDC	500	420	420	420
20	48 VDC	800	800	800	800
	24 VDC	700	700	700	700

[EBR-05G (applicable controller ECG)]

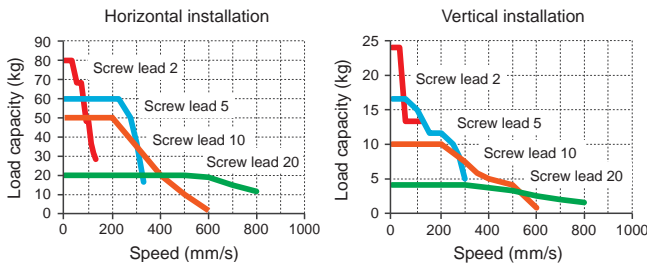
(mm/s)

Thread lead	Power supply voltage	Stroke length			
		50 to 250	300	350	400
2	24 VDC	90	85	85	85
5	24 VDC	300	210	210	210
10	24 VDC	500	420	420	420
20	24 VDC	700	700	700	700

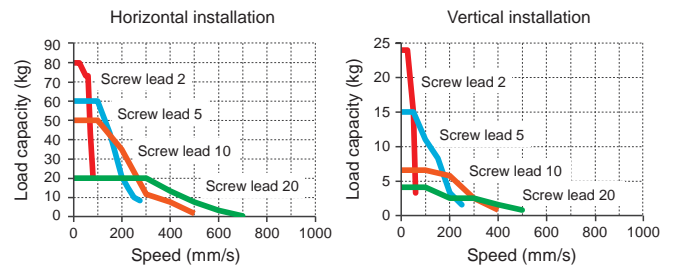
## Speed and load capacity

[EBR-05M (applicable controller ECR)]

· At 48 VDC

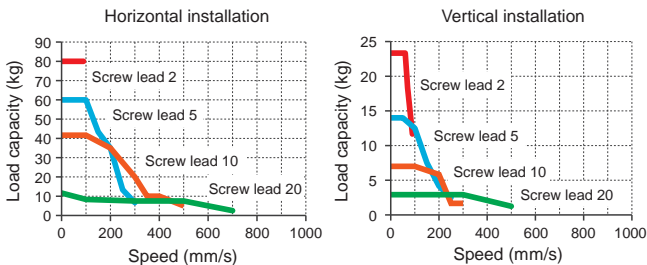


· At 24 VDC



[EBR-05G (applicable controller ECG)]

· At 24 VDC



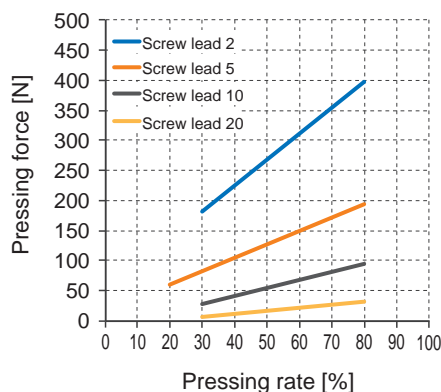
\* Incorrectly applying a 48 VDC power supply could result in damage.

\* At acceleration of 0.3 G.

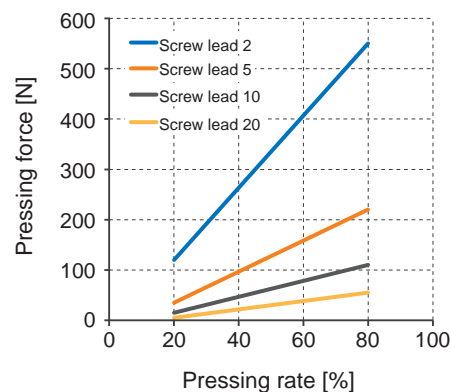
\* Confirm each of the pages listed below for details.  
 ECR: Page 88  
 ECG: Page 90

## Pressing force

[EBR-05M (applicable controller ECR)]



[EBR-05G (applicable controller ECG)]



\* The above pressing force is a reference value. Variation may occur according to conditions such as pressing speed.

EBR  
(With motor)

EBR  
(With motor)

ECR  
(Controller)

ECG-A  
(Controller)

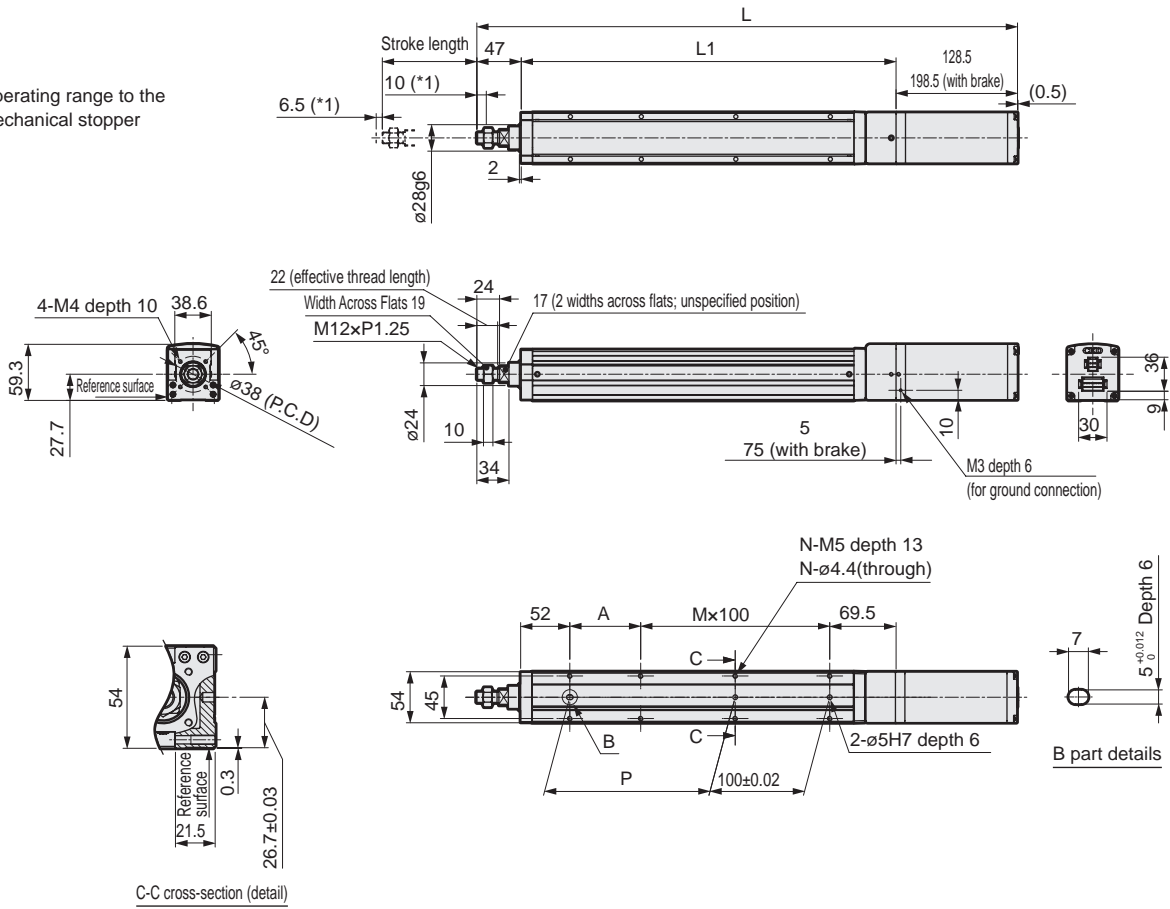
Safety  
precautions

# EBR-05\*E

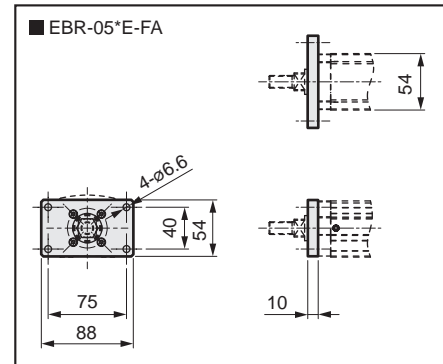
## Dimensions

### ● EBR-05\*E

\*1 Operating range to the mechanical stopper



Stroke code	0050	0100	0150	0200	0250	0300	0350	0400
Stroke length (mm)	50	100	150	200	250	300	350	400
L	Without brake	422	472	522	572	622	672	722
	With brake	492	542	592	642	692	742	792
L1	246.5	296.5	346.5	396.5	446.5	496.5	546.5	596.5
A	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4
N	6	6	8	8	10	10	12	12
P	25	75	125	175	225	275	325	375
Weight (kg)	Without brake	2.5	2.7	2.9	3.1	3.3	3.5	3.7
	With brake	3.3	3.5	3.7	3.9	4.1	4.3	4.5



EBS  
(With motor)

EBR  
(With motor)

ECR  
(Controller)

ECG-A  
(Controller)

Safety  
precautions

Notes

EBS  
(With motor)

EBR  
(With motor)

ECR  
(Controller)

ECG-A  
(Controller)

Safety  
precautions



Electric actuator Rod with built-in guide

# EBR-05\*\*

Motor side mounting (left, right, bottom)

42 Stepper motor



## How to order

**EBR - 05 M R - 00 - 05 0300 N A N - C S03**

**A** Body size

05	Body width 54 mm
----	------------------

**B** Applicable controller \*1

M	ECR
G	ECG

**C** Motor mounting direction \*2

R	Right mounting
D	Bottom mounting
L	Left mounting

**D** Mounting

00	Basic
FA	Rod side flange

**E** Screw lead

02	2 mm
05	5 mm
10	10 mm
20	20 mm

**F** Stroke \*2

0050 to 0400	50 mm (In 50 mm increments) 400 mm
--------------	------------------------------------

**H** encoder \*1

A	Battery-less absolute encoder (for ECR)
B	Battery-less absolute encoder (for ECG)
C	Incremental encoder (for ECG)

**G** Brake \*3

N	None
B	Yes

**I** Relay cable \*4

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 the controller from page 93 or page 105.

Select encoder "A" when an ECR controller is selected and "B" or "C" when an ECG controller is selected.

\*2 If "D" is selected for the motor mounting direction, select a stroke length from "0250 (250 mm)" to "0400 (400 mm)".

\*3 Select "Yes" for vertical use.

\*4 Refer to page 103 for ECR and page 116 for ECG relay cable dimensions.

Product subject to the EAR (EAR99)

## Specifications

[EBR-05M (applicable controller ECR)]

Motor	<input type="checkbox"/> 42 Stepper motor				
Encoder type	Battery-less absolute encoder				
Drive method	Ball screw ø12				
Stroke length mm	50 to 400				
Screw lead mm	2	5	10	20	
Max. load capacity kg	Horizontal	80 (80)	60 (60)	36.6 (36.6)	18.3 (18.3)
	Vertical	24 (24)	16.6 (15)	8.3 (6.6)	4.1 (4.1)
Operation speed range	mm/s	2 to 120 (80)	6 to 330 (250)	12 to 500 (400)	25 to 800 (700)
Maximum pressing force N		397	193	94	33
Press operation speed range mm/s		5 to 20	5 to 20	5 to 30	5 to 30
Repeatability mm		±0.01			
Lost motion mm		0.1 or less			
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 W	7			
	Holding force N	471	188	94	47

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

\*2 Load capacity varies according to acceleration/deceleration and speed. Refer to page 88 for details.

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

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

[EBR-05G (applicable controller ECG)]

Motor	<input type="checkbox"/> 42 Stepper motor				
Encoder type	Battery-less absolute encoder Incremental encoder				
Drive method	Ball screw ø12				
Stroke length mm	50 to 400				
Screw lead mm	2	5	10	20	
Max. load capacity kg	Horizontal	80.0	60.0	38.3	11.7
	Vertical	23.3	14.0	6.7	1.7
Operation speed range	mm/s	2 to 90	6 to 250	12 to 400	25 to 600
Maximum pressing force N		550	220	110	55
Press operation speed range mm/s		5 to 20	5 to 20	5 to 20	5 to 20
Repeatability mm		±0.01			
Lost motion mm		0.1 or less			
Motor power supply voltage		24 VDC ±10%			
Motor section max. instantaneous current A		2.7			
Brake	Model, power supply voltage	Non-excitation operation, 24 VDC ±10%			
	Power consumption W	6.1			
	Holding force N	420	168	84	42

\*1 Load capacity varies according to acceleration/deceleration and speed. Refer to page 90 for details.

\*2 The maximum speed may decrease depending on the conditions.

## [Common specifications]

Insulation resistance	10MΩ, 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

\*The operating ambient temperature of EBR-\*\*G is 10°C to 40°C.

## Stroke and max. speed

[EBR-05M (applicable controller ECR)]

(mm/s)

Thread lead	Power supply voltage	Stroke length			
		50 to 250	300	350	400
2	48 VDC	120	85	85	85
	24 VDC	80	80	80	80
5	48 VDC	330	210	210	210
	24 VDC	250	210	210	210
10	48 VDC	500	420	420	420
	24 VDC	400	400	400	400
20	48 VDC	800	800	800	800
	24 VDC	700	700	700	700

[EBR-05G (applicable controller ECG)]

(mm/s)

Thread lead	Power supply voltage	Stroke length			
		50 to 250	300	350	400
2	24 VDC	90	85	85	85
5	24 VDC	250	210	210	210
10	24 VDC	400	400	400	400
20	24 VDC	600	600	600	600

EBS  
(With motor)

EBR  
(With motor)

ECR  
(Controller)

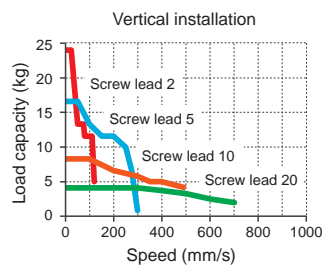
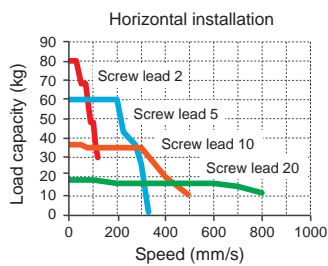
ECG-A  
(Controller)

Safety  
precautions

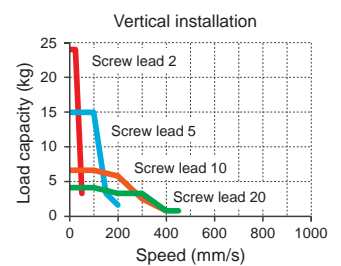
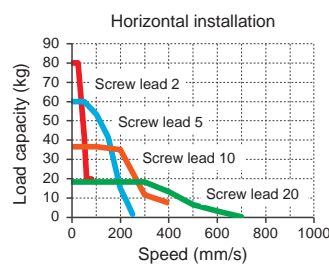
## Speed and load capacity

[EBR-05M (applicable controller ECR)]

· At 48 VDC

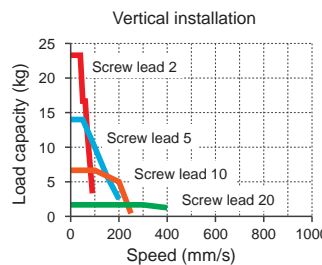
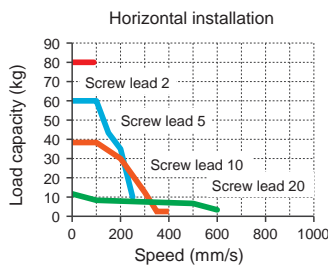


· At 24 VDC



[EBR-05G (applicable controller ECG)]

· At 24 VDC



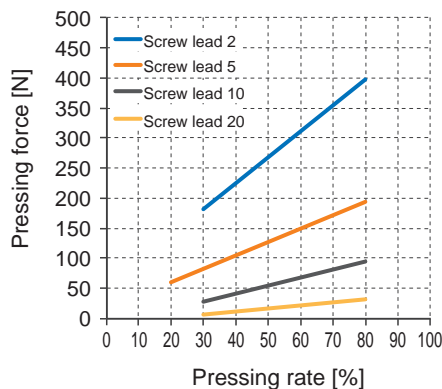
\* At acceleration of 0.3 G.

\* Confirm each of the pages listed below for details.  
ECR: Page 88  
ECG: Page 90

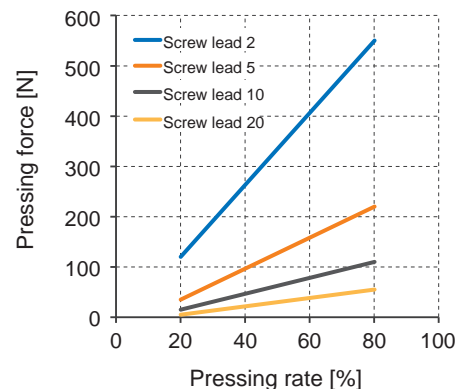
\* Incorrectly applying a 48 VDC power supply could result in damage.

## Pressing force

[EBR-05M (applicable controller ECR)]



[EBR-05G (applicable controller ECG)]



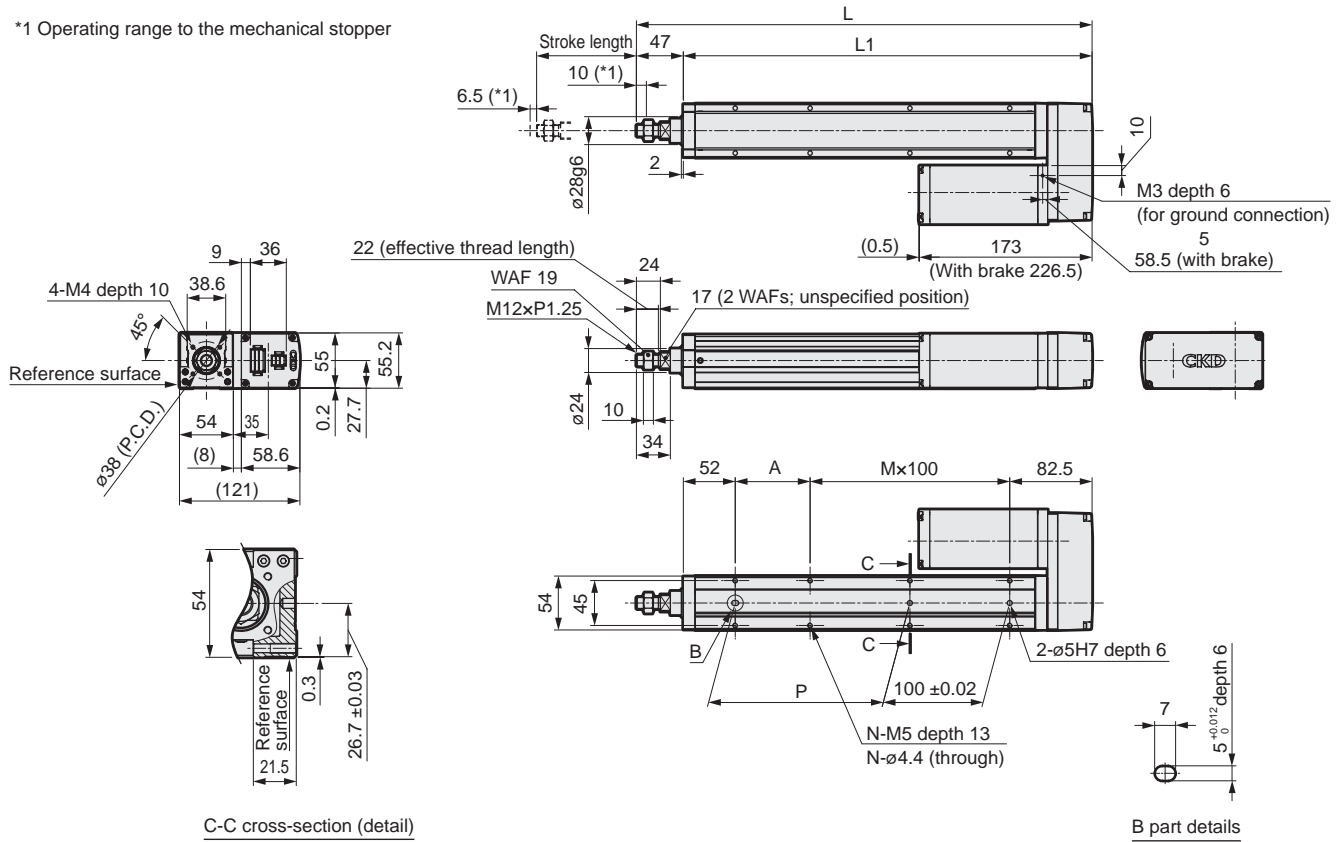
\* The above pressing force is a reference value. Variation may occur according to conditions such as pressing speed.

# EBR-05\*\*

Dimensions: Motor right-side mounting

## ● EBR-05\*R

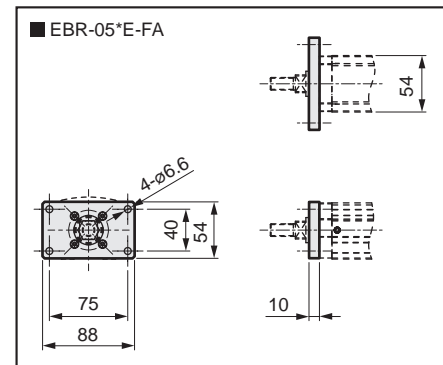
\*1 Operating range to the mechanical stopper



C-C cross-section (detail)

B part details

Stroke code	0050	0100	0150	0200	0250	0300	0350	0400
Stroke length (mm)	50	100	150	200	250	300	350	400
L	306.5	356.5	406.5	456.5	506.5	556.5	606.5	656.5
L1	259.5	309.5	359.5	409.5	459.5	509.5	559.5	609.5
A	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4
N	6	6	8	8	10	10	12	12
P	25	75	125	175	225	275	325	375
Weight (kg)	Without brake	2.4	2.5	2.6	2.8	3.1	3.2	3.5
	With brake	3.5	3.6	3.7	3.9	4.2	4.3	4.6



EBS  
(With motor)

EBR  
(With motor)

ECR  
(Controller)

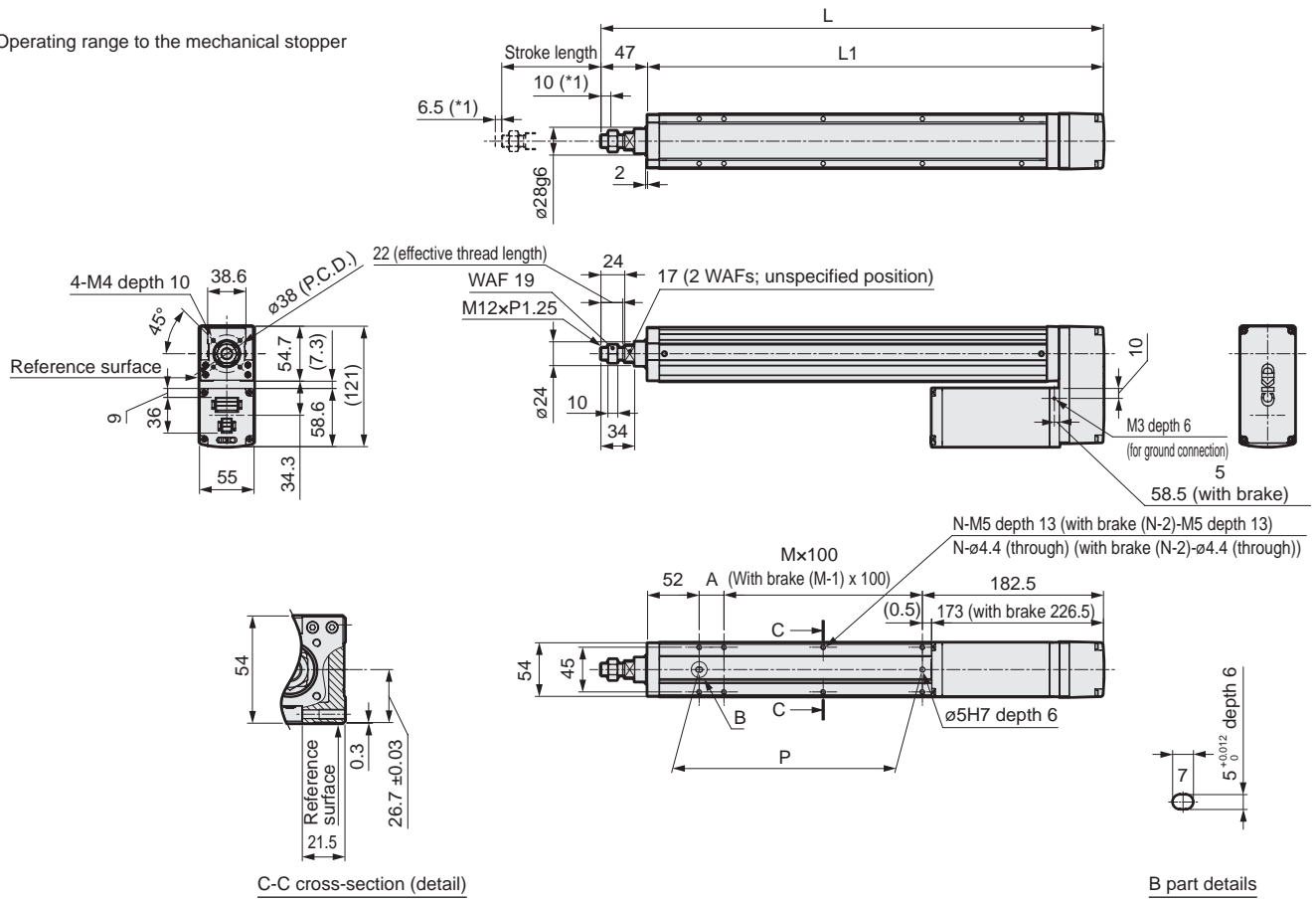
ECG-A  
(Controller)

Safety  
precautions

### Dimensions: Motor bottom mounting

#### ● EBR-05\*D

\*1 Operating range to the mechanical stopper



Stroke code	0250	0300	0350	0400	
Stroke length (mm)	250	300	350	400	
L	506.5	556.5	606.5	656.5	
L1	459.5	509.5	559.5	609.5	
A	25	75	25	75	
M	2	2	3	3	
N	8	8	10	10	
P	225	275	325	375	
Weight (kg)	Without brake	3.1	3.2	3.2	3.5
	With brake	4.2	4.3	4.3	4.6

EBS  
(With motor)

EBR  
(With motor)

ECR  
(Controller)

ECG-A  
(Controller)

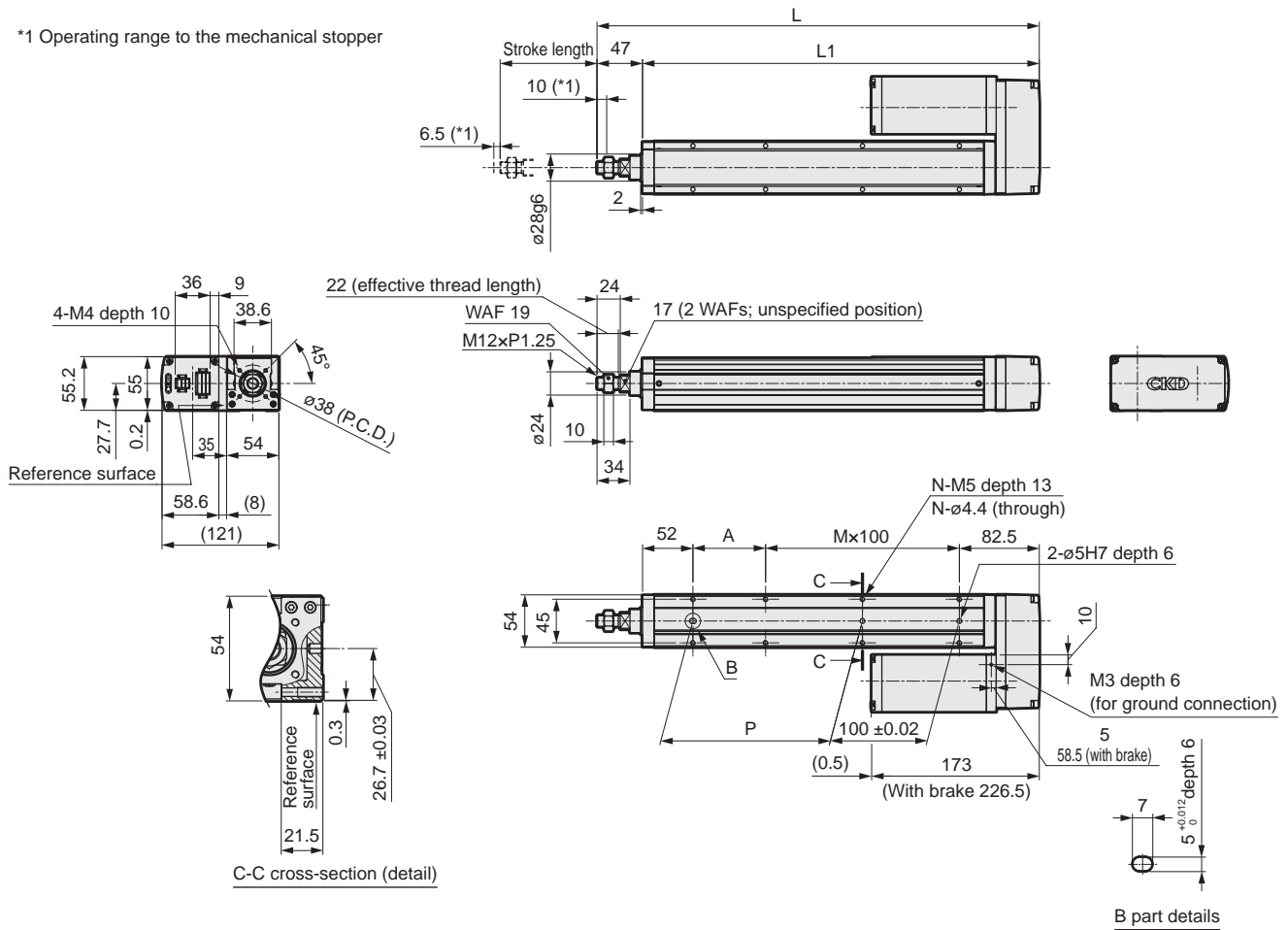
Safety  
precautions

# EBR-05\*\*

## Dimensions: Motor left-side mounting

### ● EBR-05\*L

\*1 Operating range to the mechanical stopper



Stroke code	0050	0100	0150	0200	0250	0300	0350	0400
Stroke length (mm)	50	100	150	200	250	300	350	400
L	306.5	356.5	406.5	456.5	506.5	556.5	606.5	656.5
L1	259.5	309.5	359.5	409.5	459.5	509.5	559.5	609.5
A	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4
N	6	6	8	8	10	10	12	12
P	25	75	125	175	225	275	325	375
Weight (kg)	Without brake	2.4	2.5	2.6	2.8	3.1	3.2	3.5
	With brake	3.5	3.6	3.7	3.9	4.2	4.3	4.6

EBS  
(With motor)

EBR  
(With motor)

ECR  
(Controller)

ECG-A  
(Controller)

Safety  
precautions

### Notes

EBS (With motor)
<b>EBR (With motor)</b>
ECR (Controller)
ECG-A (Controller)
Safety precautions



Electric actuator Rod with built-in guide

# EBR-08\*E

Straight motor mounting

56 Stepper motor



## How to order

**EBR - 08 M E - 00 - 05 0300 N A N - C S03**

**A Body size**

08	Body width 82 mm
----	------------------

**B Applicable controller \*1**

M	ECR
G	ECG

**C Motor mounting direction**

E	Straight mounting
---	-------------------

**D Mounting**

00	Basic
FA	Rod side flange

**E Screw lead**

05	5 mm
10	10 mm
20	20 mm

**F Stroke**

0050 to 0700	50 mm (In 50 mm increments) 700 mm
--------------	------------------------------------

**H encoder \*1**

A	Battery-less absolute encoder (for ECR)
B	Battery-less absolute encoder (for ECG)
C	Incremental encoder (for ECG)

**G Brake \*2**

N	None
B	Yes

**I Relay cable \*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 the controller from page 93 or page 105.

Select encoder "A" when an ECR controller is selected and "B" or "C" when an ECG controller is selected.

\*2 Select "Yes" for vertical use.

\*3 Refer to page 103 for ECR and page 116 for ECG relay cable dimensions.

Product subject to the EAR (EAR99)

## Specifications

### [EBR-08M (applicable controller ECR)]

Motor	<input type="checkbox"/> 56 Stepper motor			
Encoder type	Battery-less absolute encoder			
Drive method	Ball screw $\phi$ 16			
Stroke length mm	50 to 700			
Screw lead mm	5	10	20	
Max. load capacity kg *1 *2	Horizontal	80 (80)	70 (70)	35 (23.3)
	Vertical	38.3 (35)	18.3 (15)	11.6 (10)
Operation speed range *3 *4 mm/s		6 to 225 (150)	12 to 450 (300)	25 to 900 (500)
Maximum pressing force N	1050	468	213	
Press operation speed range mm/s	5 to 30	5 to 30	5 to 30	
Repeatability mm	$\pm 0.01$			
Lost motion mm	0.1 or less			
Motor power supply voltage	24 VDC $\pm 10\%$ or 48 VDC $\pm 10\%$			
Motor section max. instantaneous current A	8.6			
Brake	Model, power supply voltage	Non-excitation operation, 24 VDC $\pm 10\%$		
	Power consumption W	8		
	Holding force N	754	377	188

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

\*2 Load capacity varies according to acceleration/deceleration and speed. Refer to page 88 for details.

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

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

### [EBR-08G (applicable controller ECG)]

Motor	<input type="checkbox"/> 56 Stepper motor			
Encoder type	Battery-less absolute encoder Incremental encoder			
Drive method	Ball screw $\phi$ 16			
Stroke length mm	50 to 700			
Screw lead mm	5	10	20	
Max. load capacity kg *1	Horizontal	80.0	70.0	35.0
	Vertical	55.0	23.3	10.0
Operation speed range *2 mm/s	6 to 125	12 to 300	25 to 500	
Maximum pressing force N	965	482	241	
Press operation speed range mm/s	5 to 20	5 to 20	5 to 20	
Repeatability mm	$\pm 0.01$			
Lost motion mm	0.1 or less			
Motor power supply voltage	24 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	7.2		
	Holding force N	768	384	192

\*1 Load capacity varies according to acceleration/deceleration and speed. Refer to page 90 for details.

\*2 The maximum speed may decrease depending on the conditions.

### [Common specifications]

Insulation resistance	10M $\Omega$ , 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

\*The operating ambient temperature of EBR-\*\*G is 10°C to 40°C.

### Stroke and max. speed

[EBR-08M (applicable controller ECR)]

(mm/s)

Thread lead	Power supply voltage	Stroke length										
		50 to 200	250	300	350	400	450	500	550	600	650	700
5	48 VDC	225	225	225	200	200	200	200	200	200	200	200
	24 VDC	150	150	150	150	150	150	150	150	150	150	150
10	48 VDC	450	450	450	400	400	400	400	400	400	400	400
	24 VDC	300	300	300	300	300	300	300	300	300	300	300
20	48 VDC	900	600	600	600	600	600	600	600	600	600	600
	24 VDC	500	500	500	500	500	500	500	500	500	500	500

[EBR-08G (applicable controller ECG)]

(mm/s)

Thread lead	Power supply voltage	Stroke length
		50 to 700
5	24 VDC	125
10	24 VDC	300
20	24 VDC	500

EBS  
(With motor)

EBR  
(With motor)

ECR  
(Controller)

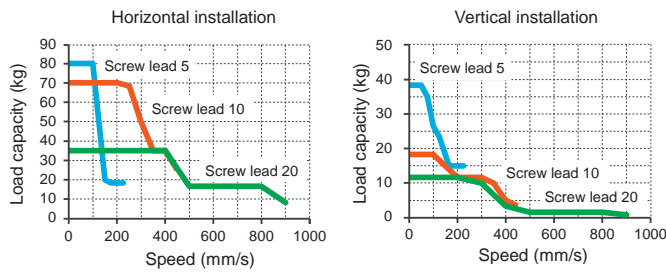
ECG-A  
(Controller)

Safety  
precautions

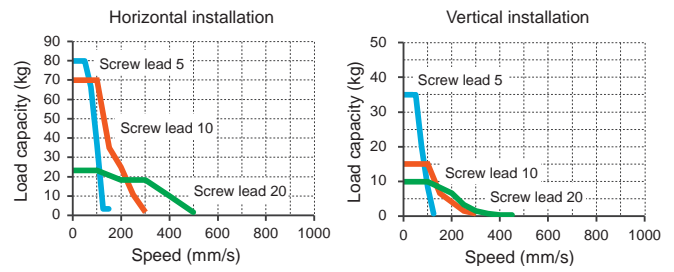
### Speed and load capacity

[EBR-08M (applicable controller ECR)]

· At 48 VDC

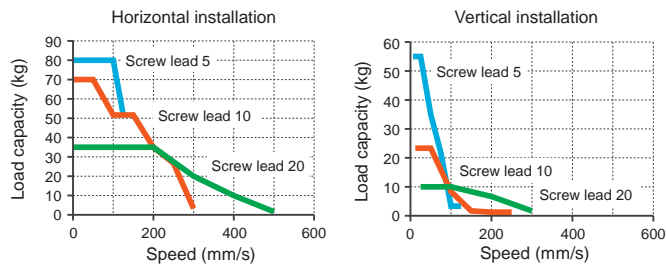


· At 24 VDC



[EBR-08G (applicable controller ECG)]

· At 24 VDC



\* At acceleration of 0.3 G.

\* Confirm each of the pages listed below for details.

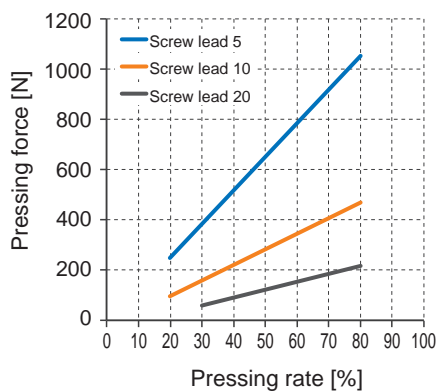
ECR: Page 88

ECG: Page 90

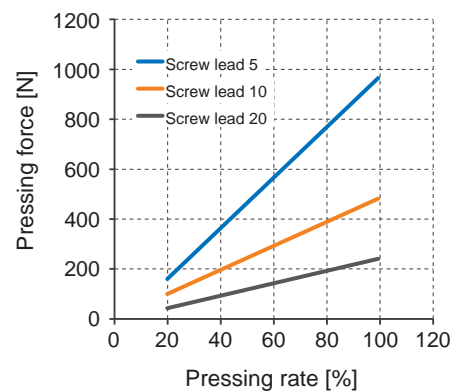
\* Incorrectly applying a 48 VDC power supply could result in damage.

### Pressing force

[EBR-08M (applicable controller ECR)]



[EBR-08G (applicable controller ECG)]



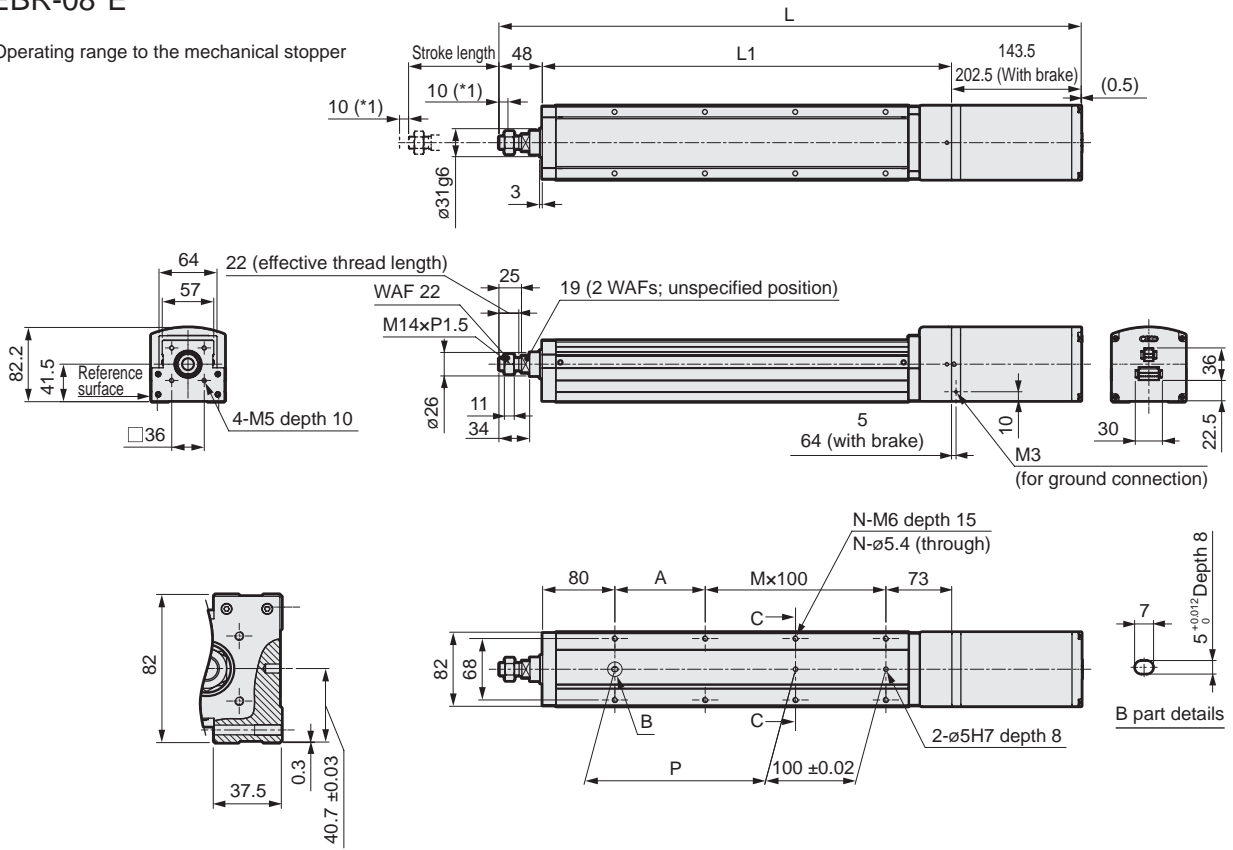
\* The above pressing force is a reference value. Variation may occur according to conditions such as pressing speed.

# EBR-08\*E

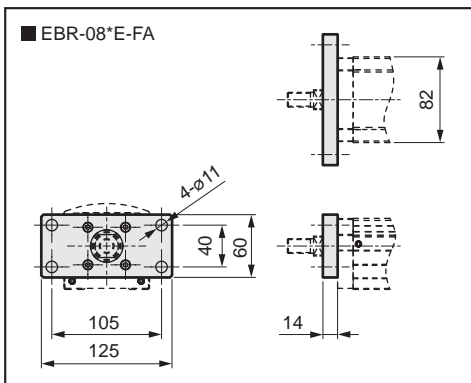
## Dimensions

### ● EBR-08\*E

\*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
Stroke length (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700
L	Without brake	494.5	544.5	594.5	644.5	694.5	744.5	794.5	844.5	894.5	944.5	1044.5	1094.5	1144.5
	With brake	553.5	603.5	653.5	703.5	753.5	803.5	853.5	903.5	953.5	1003.5	1053.5	1103.5	1153.5
L1	303	353	403	453	503	553	603	653	703	753	803	853	903	953
A	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
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700
Weight (kg)	Without brake	6.2	6.6	7.0	7.3	7.7	8.1	8.5	8.8	9.2	9.6	10.3	10.7	11.0
	With brake	7.5	7.9	8.3	8.6	9.0	9.4	9.8	10.1	10.5	10.9	11.6	12.0	12.3

Notes

EBS  
(With motor)

EBR  
(With motor)

ECR  
(Controller)

ECG-A  
(Controller)

Safety  
precautions



Electric actuator Rod with built-in guide

# EBR-08\*\*

Motor side mounting (left, right, bottom)

56 Stepper motor



## How to order

**EBR - 08 M R - 00 - 05 0300 N A N - C S03**

**A Body size**

<b>08</b>	Body width 82 mm
-----------	------------------

**B Applicable controller \*1**

<b>M</b>	ECR
<b>G</b>	ECG

**C Motor mounting direction \*2**

<b>R</b>	Right mounting
<b>D</b>	Bottom mounting
<b>L</b>	Left mounting

**E Screw lead**

<b>05</b>	5 mm
<b>10</b>	10 mm
<b>20</b>	20 mm

**D Mounting**

<b>00</b>	Basic
<b>FA</b>	Rod side flange

**F Stroke \*2**

<b>0050 to 0700</b>	50 mm (In 50 mm increments) 700 mm
---------------------	------------------------------------

**H encoder \*1**

<b>A</b>	Battery-less absolute encoder (for ECR)
<b>B</b>	Battery-less absolute encoder (for ECG)
<b>C</b>	Incremental encoder (for ECG)

**G Brake \*3**

<b>N</b>	None
<b>B</b>	Yes

**I Relay cable \*4**

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

\*1 Select the controller from page 93 or page 105.

Select encoder "A" when an ECR controller is selected and "B" or "C" when an ECG controller is selected.

\*2 If "D" is selected for the motor mounting direction, select a stroke length from "0250 (250 mm)" to "0700 (700 mm)".

\*3 Select "Yes" for vertical use.

\*4 Refer to page 103 for ECR and page 116 for ECG relay cable dimensions.

Product subject to the EAR (EAR99)

## Specifications

[EBR-08M (applicable controller ECR)]

Motor	<input type="checkbox"/> 56 Stepper motor			
Encoder type	Battery-less absolute encoder			
Drive method	Ball screw $\phi$ 16			
Stroke length mm	50 to 700			
Screw lead mm	5	10	20	
Max. load capacity kg	Horizontal	80 (80)	70 (70)	35 (23.3)
	Vertical	38.3 (35)	18.3 (15)	8.3 (8.3)
Operation speed range	mm/s	6 to 225 (100)	12 to 450 (300)	25 to 700 (500)
	mm/s	6 to 225 (100)	12 to 450 (300)	25 to 700 (500)
Maximum pressing force N	1050	468	213	
Press operation speed range mm/s	5 to 30	5 to 30	5 to 30	
Repeatability mm	$\pm 0.01$			
Lost motion mm	0.1 or less			
Motor power supply voltage	24 VDC $\pm 10\%$ or 48 VDC $\pm 10\%$			
Motor section max. instantaneous current A	8.6			
Brake	Model, power supply voltage	Non-excitation operation, 24 VDC $\pm 10\%$		
	Power consumption W	8		
	Holding force N	754	377	188

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

\*2 Load capacity varies according to acceleration/deceleration and speed. Refer to page 88 for details.

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

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

[EBR-08G (applicable controller ECG)]

Motor	<input type="checkbox"/> 56 Stepper motor			
Encoder type	Battery-less absolute encoder Incremental encoder			
Drive method	Ball screw $\phi$ 16			
Stroke length mm	50 to 700			
Screw lead mm	5	10	20	
Max. load capacity kg	Horizontal	80.0	70.0	35.0
	Vertical	55.0	20.0	8.3
Operation speed range	mm/s	6 to 125	12 to 250	25 to 400
	mm/s	6 to 125	12 to 250	25 to 400
Maximum pressing force N	965	482	241	
Press operation speed range mm/s	5 to 20	5 to 20	5 to 20	
Repeatability mm	$\pm 0.01$			
Lost motion mm	0.1 or less			
Motor power supply voltage	24 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	7.2		
	Holding force N	768	384	192

\*1 Load capacity varies according to acceleration/deceleration and speed. Refer to page 90 for details.

\*2 The maximum speed may decrease depending on the conditions.

[Common specifications]

Insulation resistance	10M $\Omega$ , 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

\*The operating ambient temperature for the EBR-\*\*G is 10°C to 40°C.

### Stroke and max. speed

[EBR-08M (applicable controller ECR)]

(mm/s)

Thread lead	Power supply voltage	Stroke length										
		50 to 200	250	300	350	400	450	500	550	600	650	700
5	48 VDC	225	225	225	200	200	200	200	200	200	200	200
	24 VDC	100	100	100	100	100	100	100	100	100	100	100
10	48 VDC	450	450	450	400	400	400	400	400	400	400	400
	24 VDC	300	300	300	300	300	300	300	300	300	300	300
20	48 VDC	700	600	600	600	600	600	600	600	600	600	600
	24 VDC	500	500	500	500	500	500	500	500	500	500	500

[EBR-08G (applicable controller ECG)]

(mm/s)

Thread lead	Power supply voltage	Stroke length
		50 to 700
5	24 VDC	125
10	24 VDC	250
20	24 VDC	400

EBS  
(With motor)

EBR  
(With motor)

ECR  
(Controller)

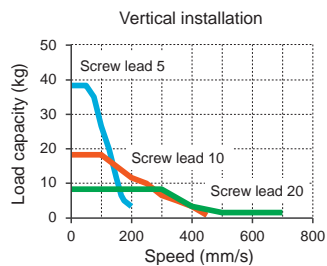
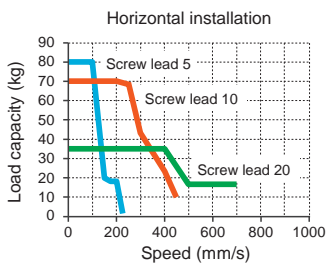
ECG-A  
(Controller)

Safety  
precautions

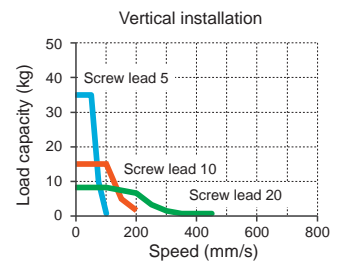
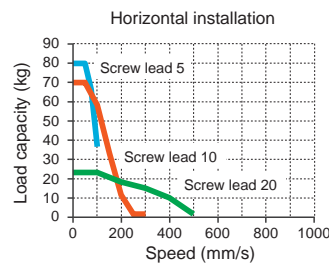
### Speed and load capacity

[EBR-08M (applicable controller ECR)]

· At 48 VDC

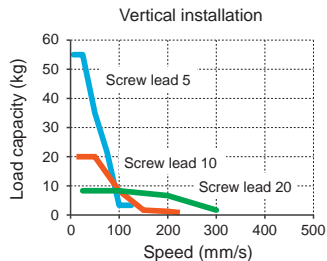
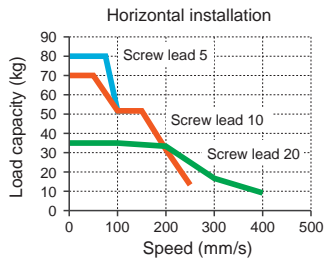


· At 24 VDC



[EBR-08G (applicable controller ECG)]

· At 24 VDC



\* At acceleration of 0.3 G.

\* Confirm each of the pages listed below for details.

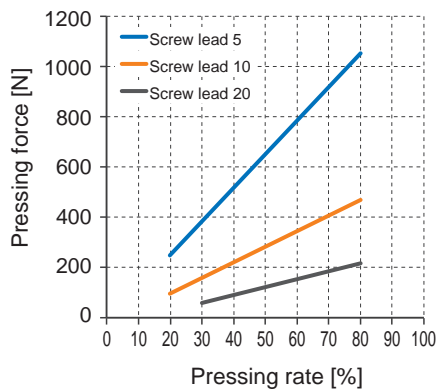
ECR: Page 88

ECG: Page 90

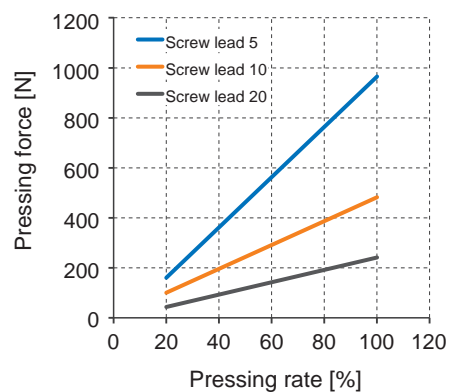
\* Incorrectly applying a 48 VDC power supply could result in damage.

### Pressing force

[EBR-08M (applicable controller ECR)]



[EBR-08G (applicable controller ECG)]



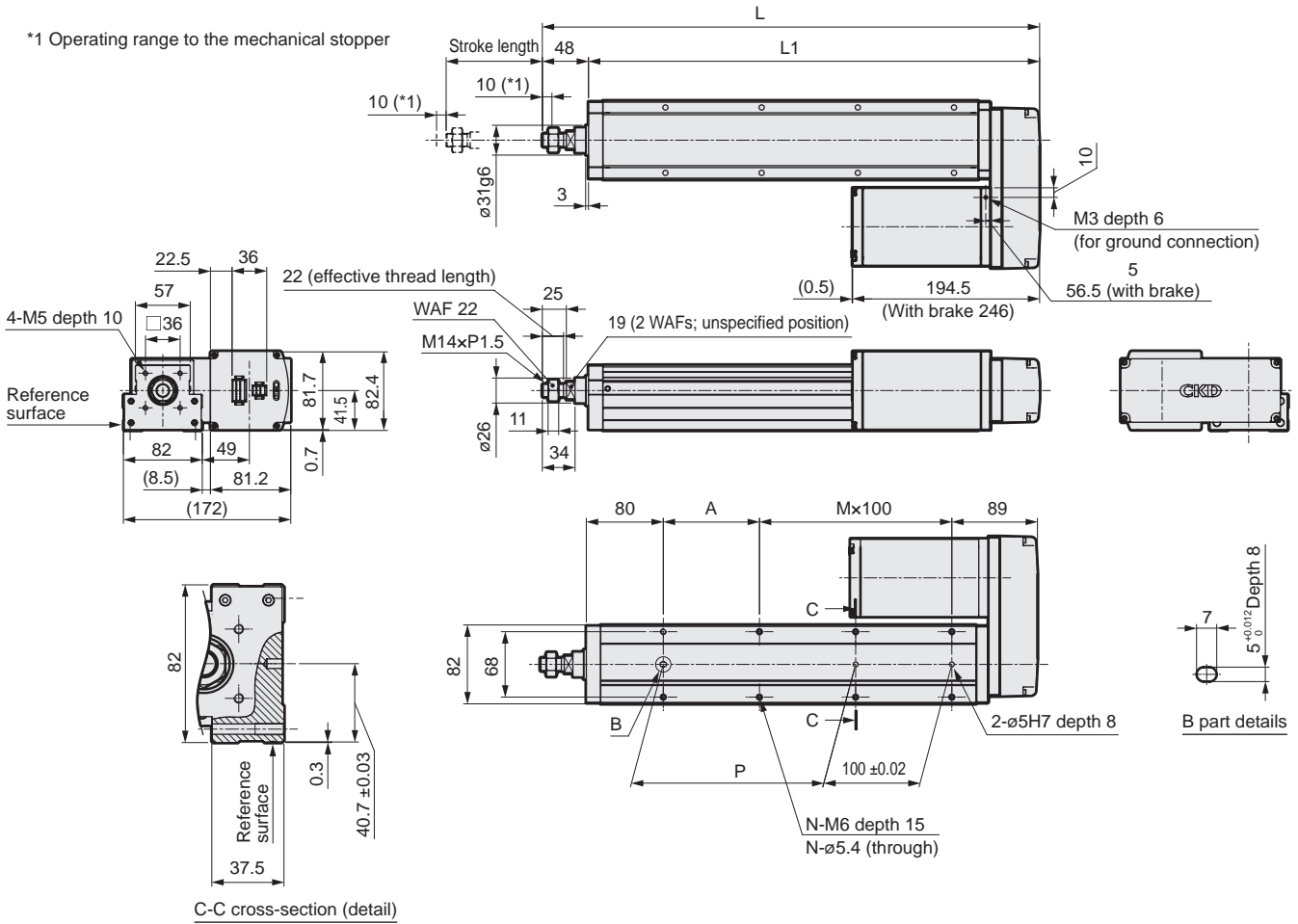
\* The above pressing force is a reference value. Variation may occur according to conditions such as pressing speed.

# EBR-08\*\*

Dimensions: Motor right-side mounting

## ● EBR-08\*R

\*1 Operating range to the mechanical stopper



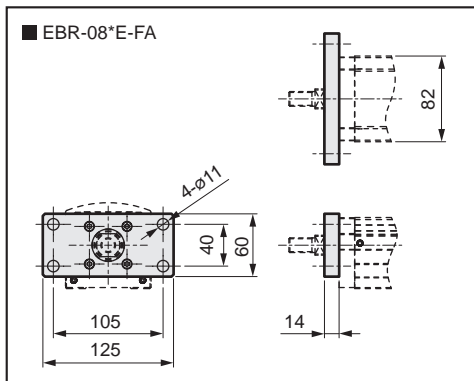
EBS  
(With motor)

EBR  
(With motor)

ECR  
(Controller)

ECG-A  
(Controller)

Safety  
precautions

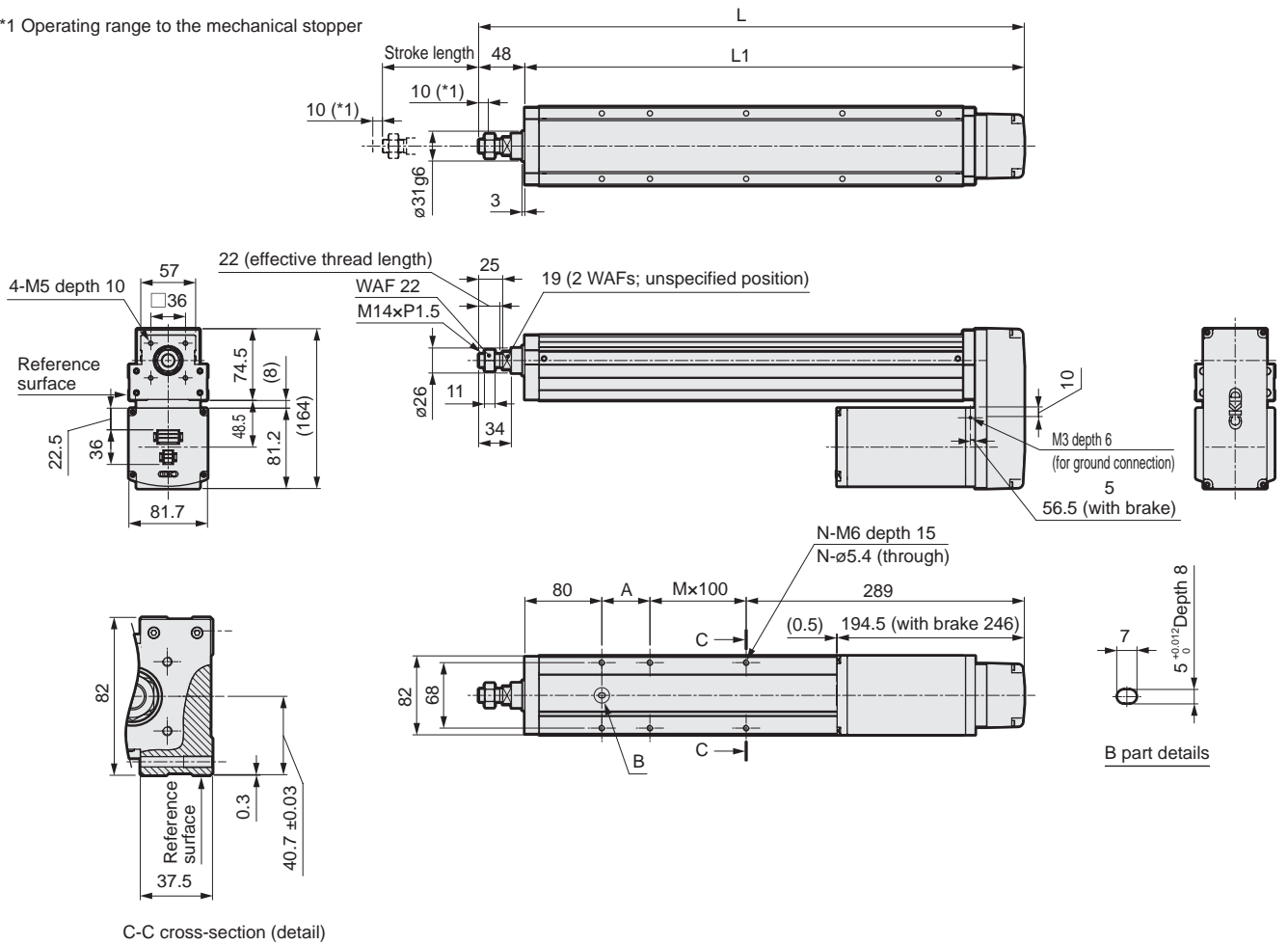


Stroke code	0050	0100	0150	0200	0250	0300	0350	0400	0450	0500	0550	0600	0650	0700	
Stroke length (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	
L	367	417	467	517	567	617	667	717	767	817	867	917	967	1017	
L1	319	369	419	469	519	569	619	669	719	769	819	869	919	969	
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	
Weight (kg)	Without brake	5.9	6.3	6.7	7.0	7.3	7.7	8.0	8.3	8.6	8.9	9.4	9.7	10.1	10.4
	With brake	7.2	7.6	8.0	8.3	8.6	9.0	9.3	9.6	9.9	10.2	10.7	11.0	11.4	11.7

### Dimensions: Motor bottom mounting

#### ● EBR-08\*D

\*1 Operating range to the mechanical stopper



C-C cross-section (detail)

Stroke code	0250	0300	0350	0400	0450	0500	0550	0600	0650	0700	
Stroke length (mm)	250	300	350	400	450	500	550	600	650	700	
L	567	617	667	717	767	817	867	917	967	1017	
L1	519	569	619	669	719	769	819	869	919	969	
A	50	100	50	100	50	100	50	100	50	100	
M	1	1	2	2	3	3	4	4	5	5	
N	6	6	8	8	10	10	12	12	14	14	
Weight (kg)	Without brake	7.3	7.7	8.0	8.3	8.6	8.9	9.4	9.7	10.1	10.4
	With brake	8.6	9.0	9.3	9.6	9.9	10.2	10.7	11.0	11.4	11.7

EBS  
(With motor)

EBR  
(With motor)

ECR  
(Controller)

ECG-A  
(Controller)

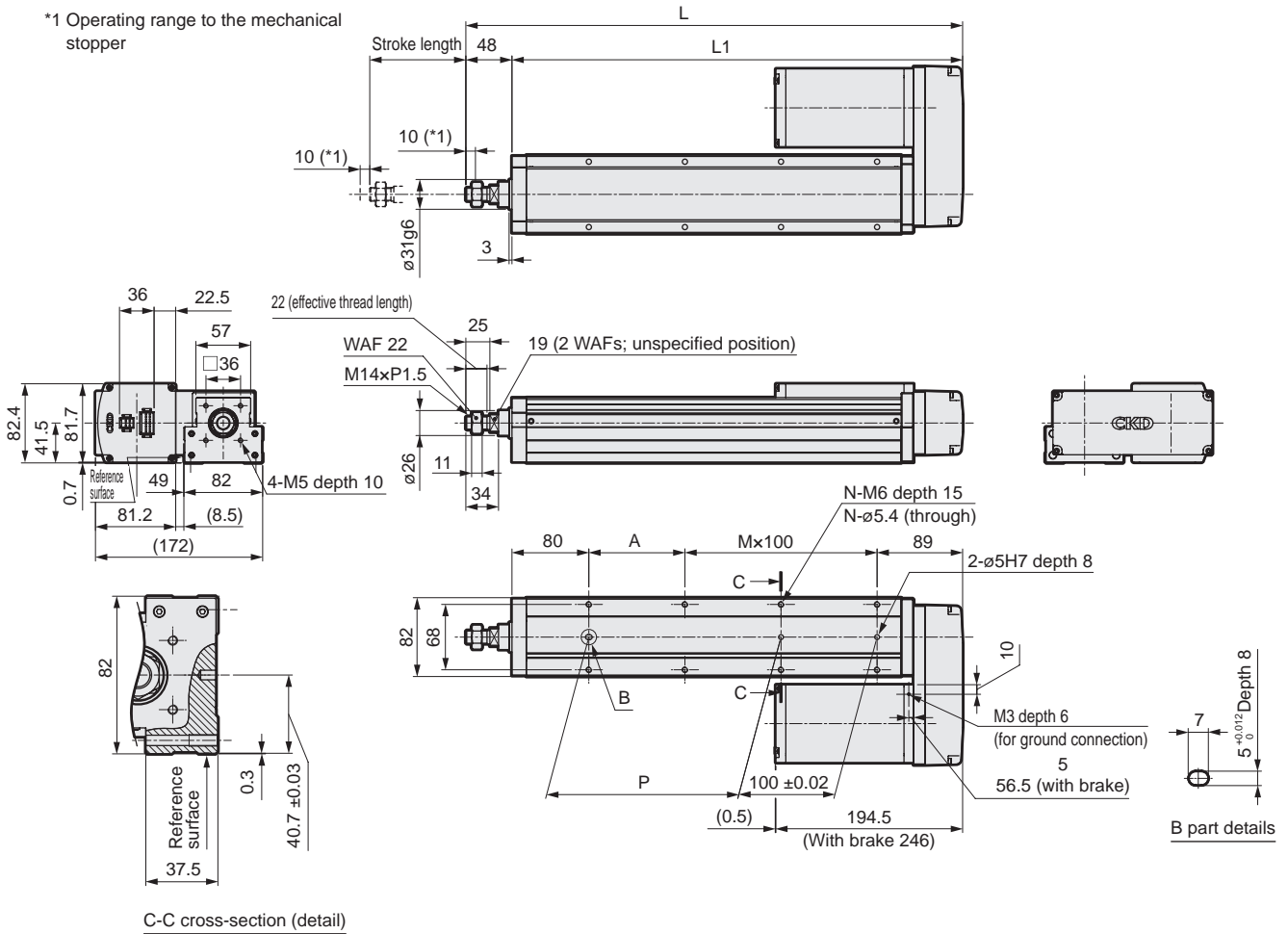
Safety  
precautions

# EBR-08\*\*

Dimensions: Motor left-side mounting

## ● EBR-08\*L

\*1 Operating range to the mechanical stopper



Stroke code	0050	0100	0150	0200	0250	0300	0350	0400	0450	0500	0550	0600	0650	0700	
Stroke length (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	
L	367	417	467	517	567	617	667	717	767	817	867	917	967	1017	
L1	319	369	419	469	519	569	619	669	719	769	819	869	919	969	
A	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	
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	
Weight (kg)	Without brake	5.9	6.3	6.7	7.0	7.3	7.7	8.0	8.3	8.6	8.9	9.4	9.7	10.1	10.4
	With brake	7.2	7.6	8.0	8.3	8.6	9.0	9.3	9.6	9.9	10.2	10.7	11.0	11.4	11.7

Safety precautions