

STEP1 Confirming load capacity

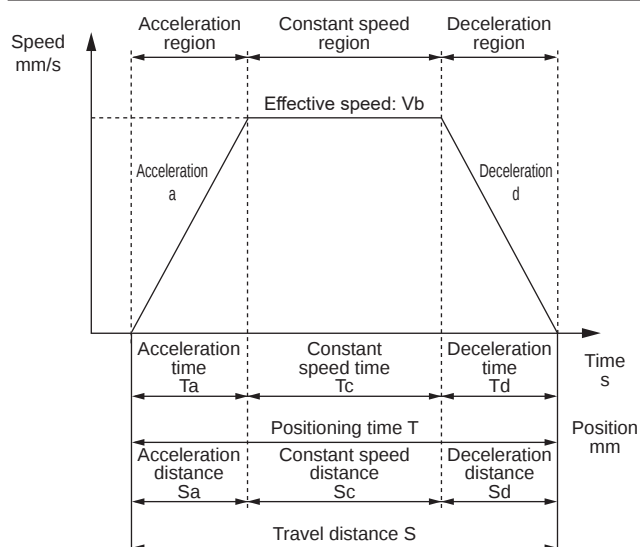
Load capacity varies with mounting orientation, screw lead, transport speed, acceleration/deceleration and power supply voltage.

Refer to the Series Variation (pages 48 to 51), the specification table for each model and the Table of Load Capacity by Speed and Acceleration/Deceleration to select the size and screw lead.

STEP2 Confirming positioning time

Calculate the positioning time with the selected product according to the following example and confirm that the required tact is achievable.

Positioning time for general transport operation



	Description	Code	Unit	Remarks
Set value	Set speed	V	mm/s	
	Set acceleration	a	mm/s ²	
	Set deceleration	d	mm/s ²	
	Travel distance	S	mm	
Calculated value	Achieved speed	Vmax	mm/s	$= \{2 \times a \times d \times S / (a + d)\}^{1/2}$
	Effective speed	Vb	mm/s	Smaller of V and Vmax
	Acceleration time	Ta	s	$= Vb / a$
	Deceleration time	Td	s	$= Vb / d$
	Constant speed time	Tc	s	$= Sc / Vb$
	Acceleration distance	Sa	mm	$= (a \times Ta^2) / 2$
	Deceleration distance	Sd	mm	$= (d \times Td^2) / 2$
	Constant speed distance	Sc	mm	$= S - (Sa + Sd)$
	Positioning time	T	s	$= Ta + Tc + Td$

* Do not use at speeds that exceed the specifications.

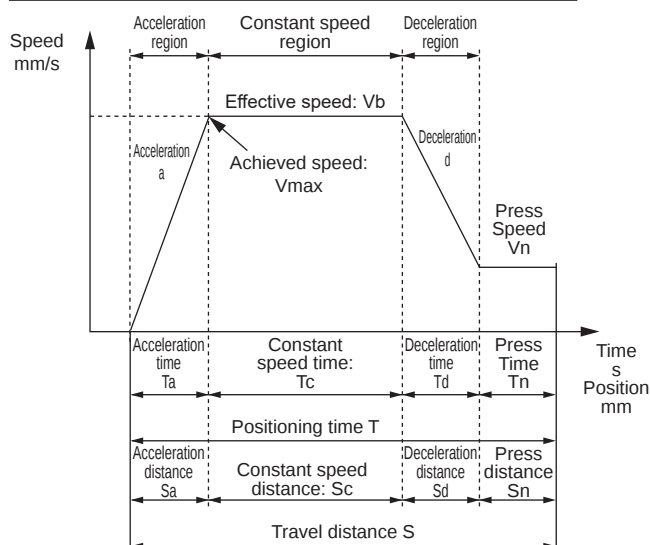
* Depending on the deceleration speed and stroke, the trapezoidal velocity waveform may not form (the set speed may not be reached). In this case, select the effective speed (Vb) from the set speed (V) and the achieved speed (Vmax), whichever is smaller.

* Acceleration/deceleration varies depending on the product and the working conditions. Refer to pages 88 to 91 for details.

* While settling time depends on working conditions, it may take 0.2 seconds or so.

* $1\text{ G} \approx 9.8\text{ m/s}^2$.

Positioning time for pressing operation



	Description	Code	Unit	Remarks
Set value	Set speed	V	mm/s	
	Set acceleration	a	mm/s ²	
	Set deceleration	d	mm/s ²	
	Travel distance	S	mm	
	Pressing distance	Sn	mm	
Calculated value	Achieved speed	Vmax	mm/s	$= \{2 \times a \times d \times (S - Sn + Vn^2 / d) / (a + d)\}^{1/2}$
	Effective speed	Vb	mm/s	The lesser value of V and Vmax
	Acceleration time	Ta	s	$= Vb / a$
	Deceleration time	Td	s	$= (Vb - Vn) / d$
	Constant speed time	Tc	s	$= Sc / Vb$
	Pressing time	Tn	s	$= Sn / Vn$
	Acceleration distance	Sa	mm	$= (a \times Ta^2) / 2$
	Deceleration distance	Sd	mm	$= ((Vb + Vn) \times Td) / 2$
	Constant speed distance	Sc	mm	$= S - (Sa + Sd + Sn)$
	Positioning time	T	s	$= Ta + Tc + Td + Tn$

* Do not use at speeds that exceed the specifications.

* Pressing speed varies depending on the product.

* Depending on the deceleration speed and stroke, the trapezoidal velocity waveform may not form (the set speed may not be reached). In this case, select the effective speed (Vb) from the set speed (V) and the achieved speed (Vmax), whichever is smaller.

* Acceleration/deceleration varies depending on the product and the working conditions. Refer to pages 88 to 91 for details.

* While settling time depends on working conditions, it may take 0.2 seconds or so.

* $1\text{ G} \approx 9.8\text{ m/s}^2$.

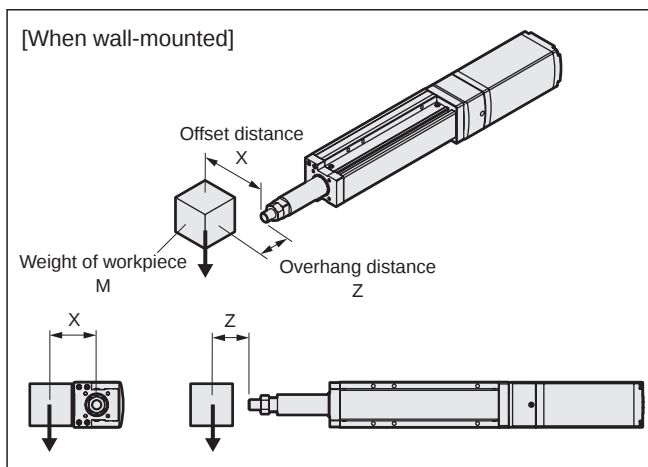
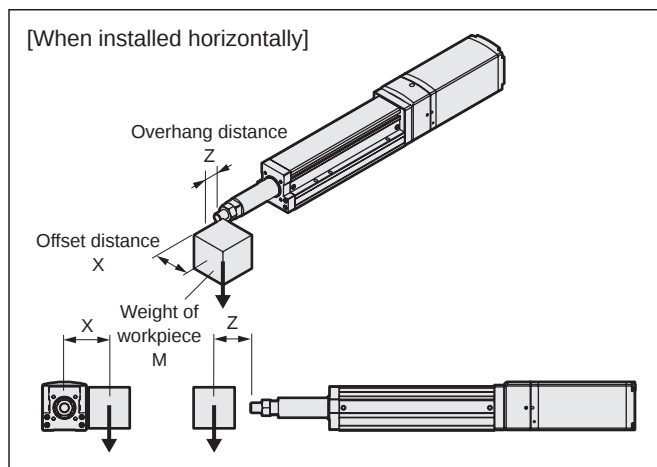
STEP3

Confirming allowable load weight (Rod with built-in guide EBR Series)

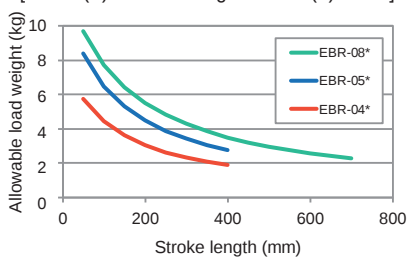
Confirm that the load weight during operation is within the allowable range (pages 84 to 85).
If the allowable load weight is exceeded, increase the size or use an external guide in conjunction.

EBS (With motor)
EBR (With motor)
ECR (Controller)
ECC-A (Controller)
Safety precautions

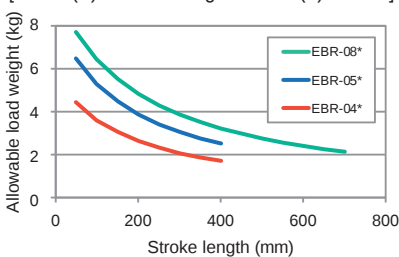
[When installed horizontally or wall-mounted]



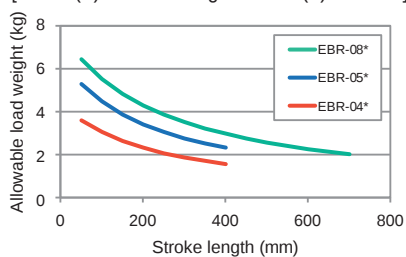
[Offset (X) 0 / Overhang distance (Z) 0 mm]



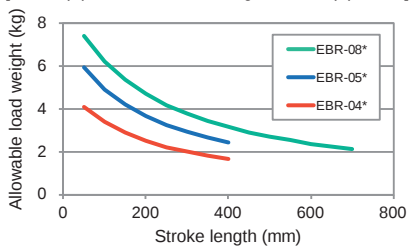
[Offset (X) 0 / Overhang distance (Z) 50 mm]



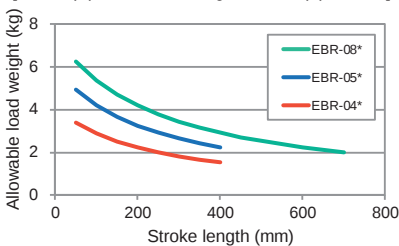
[Offset (X) 0 / Overhang distance (Z) 100 mm]



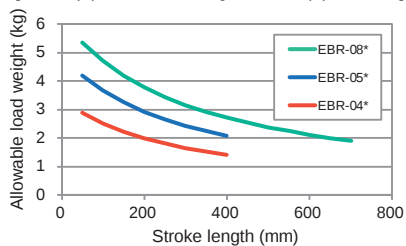
[Offset (X) 100 mm / Overhang distance (Z) 0 mm]



[Offset (X) 100 / Overhang distance (Z) 50 mm]



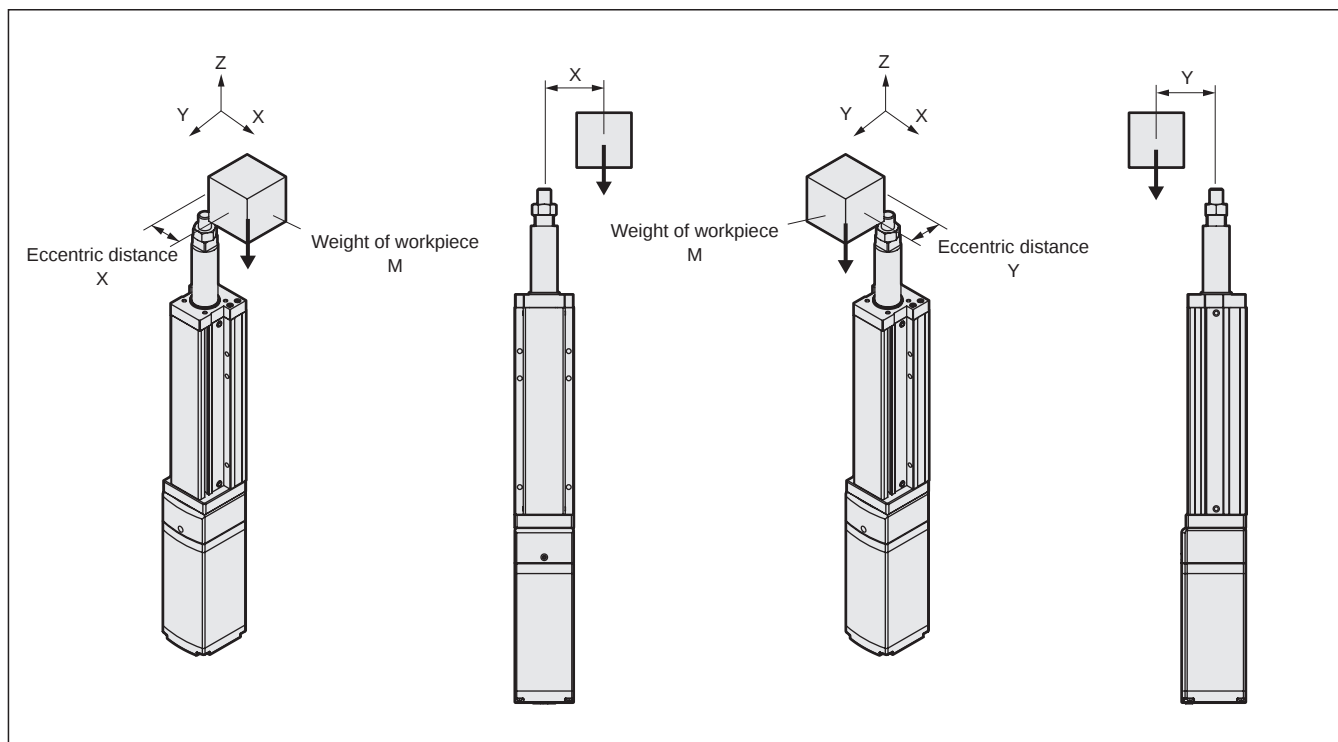
[Offset (X) 100 / Overhang distance (Z) 100 mm]



* Values are when the actuator operating life is 5,000 km. (Acceleration/deceleration 0.5 G, speed 300 mm/s)
The screw lead = 2 mm is the value when the operating life is 1,000 km.

Allowable load weight *Reference value

[When installed vertically]



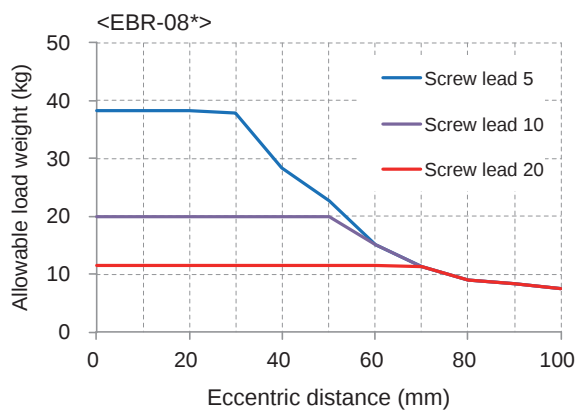
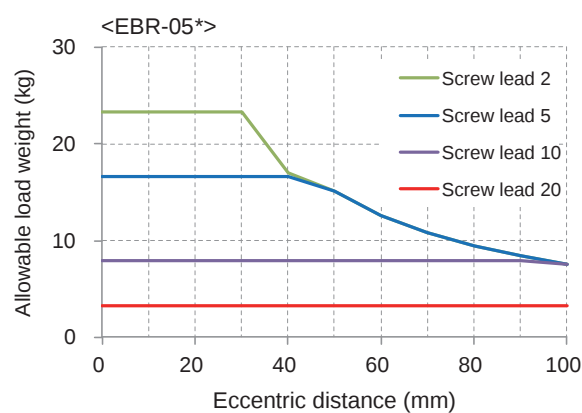
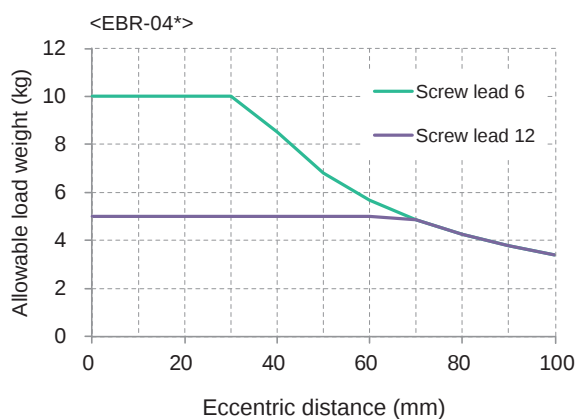
EBS
(With motor)

EBR
(With motor)

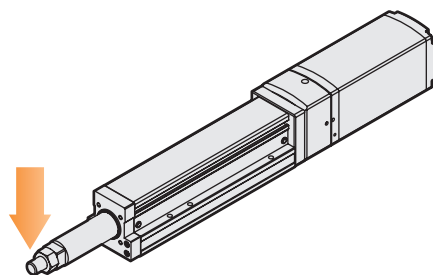
ECR
(Controller)

ECG-A
(Controller)

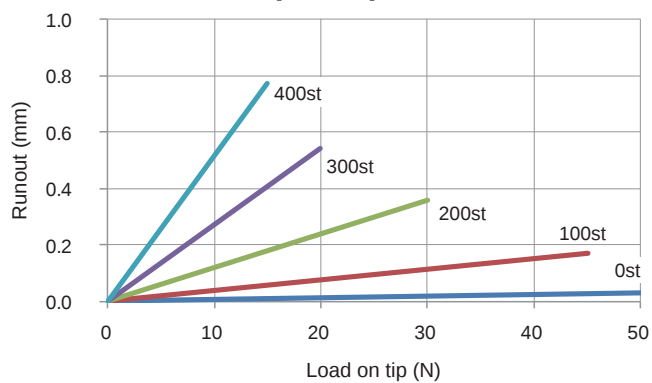
Safety
precautions



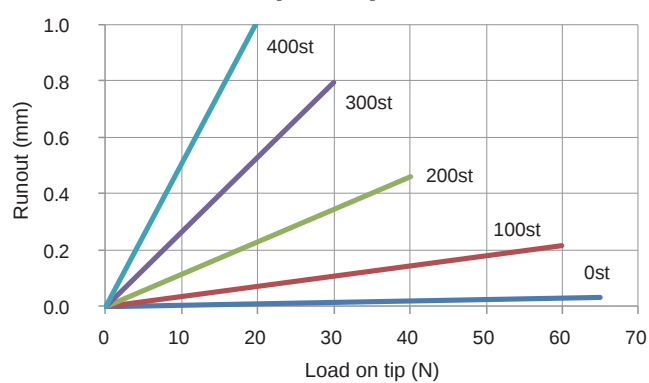
* Acceleration/deceleration: 0.5 G



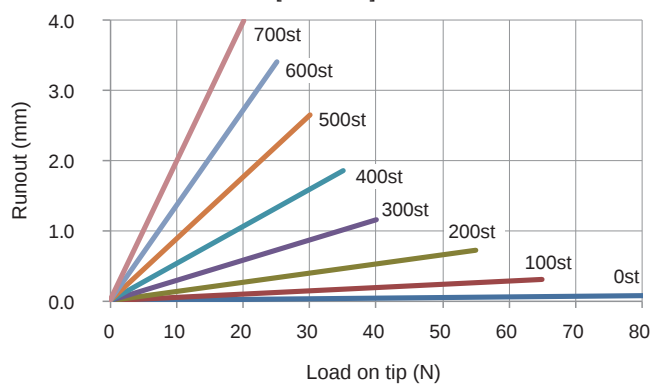
[EBR-04*]



[EBR-05*]



[EBR-08*]



EBS
(With motor)

EBR
(With motor)

ECR
(Controller)

ECG-A
(Controller)

Safety
precautions

Notes

EBS (With motor)	EBR (With motor)	ECR (Controller)	ECC-A (Controller)	Safety precautions
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EBR-M Series

Table of Load Capacity by Speed and Acceleration/Deceleration

48 VDC

[When installed horizontally]

The table below lists the maximum load capacity during acceleration/deceleration and the maximum speed at which operation is possible. Refer to the model that satisfies the required operation conditions.

EBR-04M

Screw lead 6

(kg)

Speed (mm/s)	Straight Acceleration/deceleration (G)				Left/Right/Bottom Acceleration/deceleration (G)			
	0.3	0.5	0.7	1.0	0.3	0.5	0.7	1.0
0	33.3	33.3	33.3	33.3	33.3	33.3	33.3	28.3
50	33.3	33.3	33.3	33.3	33.3	33.3	33.3	28.3
100	33.3	33.3	28.3	28.3	33.3	33.3	28.3	28.3
150	33.3	28.3	18.3	16.6	33.3	28.3	18.3	15.0
200	28.3	10.0	8.3	6.6	28.3	10.0	8.3	6.6
250	20.0	8.3	8.3	6.6	20.0	8.3	8.3	6.6
300	10.0	3.3			10.0	3.3		
350	3.3				3.3			

Screw lead 12

Speed (mm/s)	Straight Acceleration/deceleration (G)				Left/Right/Bottom Acceleration/deceleration (G)			
	0.3	0.5	0.7	1.0	0.3	0.5	0.7	1.0
0	18.3	18.3	13.3	10.0	18.3	11.6	11.6	10.0
100	18.3	18.3	13.3	10.0	18.3	11.6	11.6	10.0
200	18.3	15.8	11.6	8.3	18.3	11.6	11.6	8.3
300	16.6	13.3	9.1	8.3	16.6	11.6	9.1	6.6
400	16.6	9.1	8.3	6.6	16.6	11.6	8.3	5.0
500	8.3	8.3	5.0	5.0	8.3	6.6	3.3	3.3
600	3.3	3.3	3.3	3.3	3.3	1.6	1.6	

EBR-05M

Screw lead 2

Speed (mm/s)	Straight Acceleration/deceleration (G)				Left/Right/Bottom Acceleration/deceleration (G)			
	0.3	0.5	0.3	0.5	0.3	0.5	0.3	0.5
0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
30	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
50	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3
70	68.3	60.0	68.3	60.0	68.3	60.0	68.3	60.0
90	48.3	23.3	48.3	23.3	48.3	23.3	48.3	23.3
100	48.3	13.3	48.3	21.6	48.3	13.3	48.3	21.6
110	36.6		36.6		36.6		36.6	
120	31.6		30.0		31.6		30.0	
130	28.3				28.3			

EBR-05M

Screw lead 5

Speed (mm/s)	Straight Acceleration/deceleration (G)				Left/Right/Bottom Acceleration/deceleration (G)			
	0.3	0.5	0.7	1.0	0.3	0.5	0.7	1.0
0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
50	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
100	60.0	55.0	55.0	55.0	60.0	53.3	50.0	43.3
150	60.0	40.0	38.3	38.3	60.0	36.6	26.6	23.3
200	60.0	38.3	35.0	21.6	60.0	31.6	16.6	13.3
225	60.0	35.0	18.3	10.0	43.3	30.0	10.0	3.3
250	55.0	33.3	18.3	10.0	40.0	20.0	10.0	3.3
275	50.0	21.6	11.6	1.6	36.6	18.3	6.6	
300	36.6	18.3	8.3	1.6	26.6	8.3	3.3	
330	16.6	6.6	1.6		1.6	1.6		

Screw lead 10

Speed (mm/s)	Straight Acceleration/deceleration (G)				Left/Right/Bottom Acceleration/deceleration (G)			
	0.3	0.5	0.7	1.0	0.3	0.5	0.7	1.0
0	50.0	38.3	38.3	35.0	36.6	36.6	33.3	26.6
50	50.0	38.3	38.3	35.0	36.6	36.6	33.3	26.6
75	50.0	38.3	31.6	23.3	35.0	35.0	31.6	23.3
100	50.0	35.0	28.3	21.6	35.0	35.0	28.3	21.6
200	50.0	33.3	23.3	20.0	35.0	20.0	15.0	15.0
300	35.0	23.3	21.6	18.3	35.0	20.0	15.0	10.0
400	20.0	18.3	12.5	11.6	20.0	16.6	11.6	5.0
500	10.0	10.0	10.0	5.0	10.0	10.0	8.3	1.6
600	1.6	1.6	1.6	1.6				

Screw lead 20

Speed (mm/s)	Straight Acceleration/deceleration (G)				Left/Right/Bottom Acceleration/deceleration (G)			
	0.3	0.5	0.7	1.0	0.3	0.5	0.7	1.0
0	20.0	18.3	18.3	15.0	18.3	11.6	10.0	8.3
100	20.0	18.3	18.3	15.0	18.3	11.6	10.0	8.3
200	20.0	18.3	13.3	13.3	16.6	11.6	10.0	8.3
300	20.0	18.3	11.6	11.6	16.6	11.6	10.0	8.3
400	20.0	18.3	10.0	10.0	16.6	11.6	10.0	8.3
500	20.0	16.6	10.0	8.3	16.6	11.6	10.0	5.8
600	19.1	13.3	10.0	5.8	16.6	11.6	8.3	1.6
700	15.0	10.0	6.6	3.3	15.0	10.0	6.6	1.6
800	11.6	6.6	1.6	1.6	11.6	6.6	1.6	0.8

EBR-08M

Screw lead 5

Speed (mm/s)	Straight Acceleration/deceleration (G)				Left/Right/Bottom Acceleration/deceleration (G)			
	0.3	0.5	0.7	1.0	0.3	0.5	0.7	1.0
0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
50	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
75	80.0	80.0	80.0	80.0	80.0	80.0	80.0	51.6
100	80.0	80.0	80.0	20.0	80.0	68.3	68.3	20.0
125	50.0	31.6	23.3	20.0	50.0	26.6	18.3	6.6
150	20.0	20	8.3	3.3	20.0	15.0		
175	18.3	8.3			18.3			
200	18.3				18.3			
225	18.3				1.6			

Screw lead 10

Speed (mm/s)	Straight Acceleration/deceleration (G)				Left/Right/Bottom Acceleration/deceleration (G)			
	0.3	0.5	0.7	1.0	0.3	0.5	0.7	1.0
0	70.0	70.0	70.0	68.3	70.0	70.0	70.0	60.0
100	70.0	70.0	70.0	68.3	70.0	70.0	70.0	60.0
150	70.0	70.0	70.0	50.0	70.0	70.0	61.6	46.6
200	70.0	43.3	31.6	23.3	70.0	40.0	26.6	23.3
250	68.3	31.6	21.6	10.0	68.3	23.3	18.3	10.0
300	50.0	28.3	18.3	10.0	43.3	18.3	11.6	
350	35.0	25.0	15.0	1.6	33.3	15.0	8.3	
400	35.0	21.6	11.6		23.3	11.6	3.3	
450	25.0	18.3	6.6		10.0			

Screw lead 20

Speed (mm/s)	Straight Acceleration/deceleration (G)				Left/Right/Bottom Acceleration/deceleration (G)			
	0.3	0.5	0.7	1.0	0.3	0.5	0.7	1.0
0	35.0	35.0	28.3	26.6	35.0	23.3	23.3	23.3
100	35.0	35.0	28.3	26.6	35.0	23.3	23.3	23.3
200	35.0	35.0	26.6	26.6	35.0	23.3	23.3	23.3
300	35.0	35.0	23.3	16.6	35.0	23.3	18.3	16.6
400	35.0	26.6	20.0	11.6	35.0	23.3	18.3	11.6
500	16.6	16.6	13.3	5.0	16.6	16.6	11.6	5.0
600	16.6	16.6	10.0	3.3	16.6	13.3	8.3	1.6
700	16.6	13.3	8.3	3.3	16.6	11.6	5.0	0.8
800	16.6	10.0	8.3	1.6				
900	8.3	8.3	5.0					

[When installed vertically]

EBR-04M

Screw lead 6

Speed (mm/s)	Straight Acceleration/deceleration (G)		Left/Right/Bottom Acceleration/deceleration (G)	
	0.3	0.5	0.3	0.5
0	10.0	8.3	9.1	8.3
50	10.0	8.3	9.1	8.3
100	8.3	8.3	9.1	8.3
150	8.3	6.6	8.3	5.8
200	6.6	5.0	6.6	4.1
250	5.0	3.3	3.7	2.0
300	3.3	1.6	2.0	0.8
350	1.6			

Screw lead 12

Speed (mm/s)	Straight Acceleration/deceleration (G)		Left/Right/Bottom Acceleration/deceleration (G)	
	0.3	0.5	0.3	0.5
0	5.0	4.1	5.0	4.1
100	5.0	4.1	5.0	4.1
200	5.0	4.1	5.0	4.1
300	4.1	3.3	4.1	3.3
400	3.3	3.3	3.3	3.3
500	1.6	2.5	1.6	1.6
600	1.6	0.8	0.8	0.4

EBR-05M

Screw lead 2

Speed (mm/s)	Straight Acceleration/deceleration (G)		Left/Right/Bottom Acceleration/deceleration (G)	
	0.3	0.5	0.3	0.5
0	24.0	23.3	24.0	23.3
25	24.0	23.3	24.0	23.3
50	23.3	23.3	23.3	23.3
60	18.3	18.3	18.3	18.3
70	15.0	15.0	15.0	15.0
75	13.3	8.3	13.3	8.3
80	13.3	8.3	11.6	8.3
90	13.3	0.8	11.6	0.8
100	13.3		11.6	
110	13.3		11.6	
120	13.3		5.0	

Screw lead 5

Speed (mm/s)	Straight Acceleration/deceleration (G)		Left/Right/Bottom Acceleration/deceleration (G)	
	0.3	0.5	0.3	0.5
0	16.6	16.6	16.6	16.6
50	16.6	16.6	16.6	16.6
100	15.0	13.3	13.3	13.3
150	11.6	11.6	11.6	11.6
200	11.6	8.3	11.6	8.3
250	10.0	6.6	10.0	5.0
275	8.3	3.3	6.6	0.8
300	5.0	3.3	0.8	0.8

Screw lead 10

	Straight		Left/Right/Bottom	
Speed (mm/s)	Acceleration/deceleration (G)			
	0.3	0.5	0.3	0.5
0	10.0	7.9	8.3	7.9
100	10.0	7.9	8.3	7.9
200	10.0	7.5	6.6	7.5
300	7.5	5.4	5.8	5.4
350	5.8	3.7	5.0	3.7
400	5.0	3.7	5.0	3.7
500	4.1	2.5	4.1	2.5
600	0.8	0.4		

Table of Load Capacity by Speed and Acceleration/Deceleration

24 VDC

[When installed horizontally]

EBR-04M

(kg)

Screw lead 6

Speed (mm/s)	Straight		Left/Right/Bottom	
	Acceleration/deceleration (G)		Acceleration/deceleration (G)	
	0.3	0.7	0.3	0.7
0	33.3	26.6	33.3	26.6
50	33.3	26.6	33.3	26.6
100	33.3	15.8	33.3	15.8
150	14.1	1.6	13.3	1.6
200	1.6		1.6	
250	1.6			

Screw lead 12

Speed (mm/s)	Straight		Left/Right/Bottom	
	Acceleration/deceleration (G)		Acceleration/deceleration (G)	
	0.3	0.7	0.3	0.7
0	18.3	6.6	18.3	6.6
100	18.3	6.6	18.3	6.6
200	15.4	6.6	15.8	6.6
300	4.5	1.6	5.0	1.6
400	4.5	0.8	0.8	
500	1.6			

* At 24 VDC, operation is possible up to 0.7 G when horizontally installed and 0.3 G when vertically installed.
Contact CKD for details.

EBR-05M

Screw lead 2

Speed (mm/s)	Straight		Left/Right/Bottom	
	Acceleration/deceleration (G)		Acceleration/deceleration (G)	
	0.3	0.5	0.3	0.5
0	80.0	80.0	80.0	80.0
25	80.0	80.0	80.0	80.0
50	73.3	46.6	41.6	41.6
60	73.3	10.0	20.0	10.0
70	43.3		20.0	
80	20.0		20.0	

Screw lead 5

Speed (mm/s)	Straight		Left/Right/Bottom	
	Acceleration/deceleration (G)		Acceleration/deceleration (G)	
	0.3	0.7	0.3	0.7
0	60.0	60.0	60.0	60.0
50	60.0	60.0	60.0	60.0
100	60.0	20.0	53.3	20.0
150	43.3	5.0	41.6	5.0
200	20.8		15.0	
225	15.0		8.3	
250	10.0		1.6	
275	8.3			

Screw lead 10

Speed (mm/s)	Straight		Left/Right/Bottom	
	Acceleration/deceleration (G)		Acceleration/deceleration (G)	
	0.3	0.7	0.3	0.7
0	50.0	26.6	36.6	26.6
50	50.0	26.6	36.6	26.6
100	50.0	16.6	36.6	8.3
200	35.0	11.6	35.0	5.0
300	11.6	3.3	11.6	3.3
400	7.5	1.6	7.5	
500	1.6			

Screw lead 20

Speed (mm/s)	Straight		Left/Right/Bottom	
	Acceleration/deceleration (G)		Acceleration/deceleration (G)	
	0.3	0.7	0.3	0.7
0	20.0	18.3	18.3	10.0
50	20.0	18.3	18.3	10.0
100	20.0	15.8	18.3	10.0
200	20.0	13.3	18.3	10.0
300	20.0	10.0	18.3	10.0
400	13.3	5.0	13.3	5.0
500	7.5	1.6	6.6	1.6
600	3.3		3.3	
700	0.4		0.4	

EBR-08M

Screw lead 5

Speed (mm/s)	Straight		Left/Right/Bottom	
	Acceleration/deceleration (G)		Acceleration/deceleration (G)	
	0.3	0.7	0.3	0.7
0	80.0	80.0	80.0	80.0
25	80.0	80.0	80.0	80.0
50	80.0	80.0	80.0	80.0
75	66.6	66.6	66.6	21.6
100	36.6	3.3	36.6	
125	3.3			
150	3.3			

Screw lead 10

Speed (mm/s)	Straight		Left/Right/Bottom	
	Acceleration/deceleration (G)		Acceleration/deceleration (G)	
	0.3	0.7	0.3	0.7
0	70.0	70.0	70.0	70.0
50	70.0	70.0	70.0	70.0
100	70.0	33.3	58.3	33.3
150	35.0	5.0	33.3	5.0
200	25.0		11.6	
250	10.8		1.6	
300	1.6		1.6	

Screw lead 20

Speed (mm/s)	Straight		Left/Right/Bottom	
	Acceleration/deceleration (G)		Acceleration/deceleration (G)	
	0.3	0.7	0.3	0.7
0	23.3	23.3	23.3	18.3
100	23.3	23.3	23.3	18.3
200	18.3	16.6	18.3	8.3
300	18.3	10.0	15.0	5.0
400	10.0	5.0	10.0	1.6
500	1.6	1.6	1.6	

[When installed vertically]

EBR-04M

Screw lead 6

Speed (mm/s)	Straight		Left/Right/Bottom	
	Acceleration/deceleration (G)		Acceleration/deceleration (G)	
	0.3		0.3	
0	9.1		9.1	
50	9.1		9.1	
100	7.5		7.5	
150	2.9		2.9	
200	0.4		0.4	

Screw lead 12

Speed (mm/s)	Straight		Left/Right/Bottom	
	Acceleration/deceleration (G)		Acceleration/deceleration (G)	
	0.3		0.3	
0	4.5		4.5	
100	4.5		4.5	
200	2.0		2.0	
250	0.4		0.8	
300	0.4			

EBR-05M

Screw lead 2

Speed (mm/s)	Straight		Left/Right/Bottom	
	Acceleration/deceleration (G)		Acceleration/deceleration (G)	
	0.3		0.3	
0	24.0		24.0	
25	24.0		24.0	
50	15.0		3.3	
60	3.3			

Screw lead 5

Speed (mm/s)	Straight		Left/Right/Bottom	
	Acceleration/deceleration (G)		Acceleration/deceleration (G)	
	0.3		0.3	
0	15.0		15.0	
50	15.0		15.0	
100	11.0		15.0	
150	8.3		3.3	
200	3.3		1.6	
250	1.6			

Screw lead 10

Speed (mm/s)	Straight		Left/Right/Bottom	
	Acceleration/deceleration (G)		Acceleration/deceleration (G)	
	0.3		0.3	
0	6.6		6.6	
100	6.6		6.6	
200	5.8		5.8	
300	2.5		2.5	
400	0.8		0.8	

Screw lead 20

Speed (mm/s)	Straight		Left/Right/Bottom	
	Acceleration/deceleration (G)		Acceleration/deceleration (G)	
	0.3		0.3	
0	4.1		4.1	
100	4.1		4.1	
200	2.5		3.3	
300	2.5		3.3	
400	1.6		0.8	
450	0.8		0.8	
500	0.8			

EBR-08M

Screw lead 5

Speed (mm/s)	Straight		Left/Right/Bottom	
	Acceleration/deceleration (G)		Acceleration/deceleration (G)	
	0.3		0.3	
0	35.0		35.0	
25	35.0		35.0	
50	35.0		35.0	
75	20.0		10.0	
100	8.3		0.8	
125	0.8			

Screw lead 10

Speed (mm/s)	Straight		Left/Right/Bottom	
	Acceleration/deceleration (G)		Acceleration/deceleration (G)	
	0.3		0.3	
0	15.0		15.0	
50	15.0		15.0	
100	15.0		15.0	
150	6.6		5.0	
200	4.1		1.6	
250	1.6			
300	0.8			

Screw lead 20

Speed (mm/s)	Straight		Left/Right/Bottom	
	Acceleration/deceleration (G)		Acceleration/deceleration (G)	
	0.3		0.3	
0	10.0		8.3	
100	10.0		8.3	
200	6.6		6.6	
250	3.3		3.3	
300	1.6		1.6	
350	0.8		0.8	
400	0.4		0.8	
450	0.4		0.8	

Table of Load Capacity by Speed and Acceleration/Deceleration

24 VDC

[When installed horizontally]

The table below lists the maximum load capacity during acceleration/deceleration and the maximum speed at which operation is possible. Refer to the model that satisfies the required operation conditions.

EBR-04G

Screw lead 6

(kg)

	Straight		Left/Right/Bottom	
Speed (mm/s)	Acceleration/deceleration (G)			
	0.3	0.7	0.3	0.7
0	40.0	40.0	40.0	35.0
50	40.0	40.0	40.0	35.0
100	33.3	25.8	33.3	25.8
150	23.3	17.5	23.3	17.5
200	10.0	8.3	10.0	8.3

Screw lead 12

Speed (mm/s)	Straight		Left/Right/Bottom	
	Acceleration/deceleration (G)			
	0.3	0.7	0.3	0.7
0	12.5	6.7	12.5	6.7
100	12.5	6.7	12.5	6.7
200	10.0	6.7	7.5	5.0
300	5.0	2.5	5.0	2.5
350	1.7	1.3	0.8	0.8
400	1.7	1.3		

EBR-05G

Screw lead 2

		Straight		Left/Right/Bottom	
		Acceleration/deceleration (G)			
Speed (mm/s)		0.3	0.7	0.3	0.7
0		80.0	80.0	80.0	80.0
25		80.0	80.0	80.0	80.0
50		80.0	80.0	80.0	80.0
70		80.0	80.0	80.0	80.0
80		80.0	80.0	80.0	80.0
90		80.0	80.0	80.0	80.0

Screw lead 5

Straight		Left/Right/Bottom		
Speed (mm/s)	Acceleration/deceleration (G)			
	0.3	0.7	0.3	0.7
0	60.0	60.0	60.0	60.0
50	60.0	60.0	60.0	60.0
100	60.0	53.3	60.0	43.3
150	43.3	35.0	43.3	26.7
200	35.0	20.0	35.0	18.3
250	13.3	8.3	10.0	7.5
275	10.0	6.7		
300	6.7	6.7		

Screw lead 10

	Straight		Left/Right/Bottom	
Speed (mm/s)	Acceleration/deceleration (G)			
	0.3	0.7	0.3	0.7
0	41.7	20.0	38.3	20.0
100	41.7	20.0	38.3	20.0
200	35.0	20.0	30.0	14.2
300	20.0	8.3	12.5	6.7
350	10.0	5.0	2.5	0.8
400	10.0	5.0	2.5	
500	5.0	1.7		

Screw lead 20

	Straight		Left/Right/Bottom	
Speed (mm/s)	Acceleration/deceleration (G)			
	0.3	0.7	0.3	0.7
0	11.7	11.7	11.7	5.8
100	8.3	8.3	8.3	5.8
300	7.5	5.8	7.5	5.8
500	7.5	3.3	6.7	3.3
600	5.0	1.7	3.3	1.7
700	2.5	0.8		

EBR-08G

Screw lead 5

Speed (mm/s)	Straight		Left/Right/Bottom	
	Acceleration/deceleration (G)			
	0.3	0.7	0.3	0.7
0	80.0	80.0	80.0	80.0
25	80.0	80.0	80.0	80.0
50	80.0	80.0	80.0	80.0
75	80.0	80.0	80.0	80.0
100	80.0	51.7	51.7	43.3
125	51.7	43.3	51.7	43.3

Screw lead 10

Speed (mm/s)	Straight		Left/Right/Bottom	
	Acceleration/deceleration (G)			
	0.3	0.7	0.3	0.7
0	70.0	70.0	70.0	70.0
50	70.0	70.0	70.0	70.0
100	51.7	35.0	51.7	35.0
150	51.7	26.7	51.7	26.7
200	35.0	26.7	31.7	18.3
250	26.7	3.3	13.3	3.3
300	3.3			

Screw lead 20

Straight		Left/Right/Bottom		
Speed (mm/s)	Acceleration/deceleration (G)			
	0.3	0.7	0.3	0.7
0	35.0	26.7	35.0	21.7
100	35.0	26.7	35.0	21.7
200	35.0	18.3	33.3	18.3
300	20.0	10.0	16.7	9.2
400	10.0	1.7	9.2	1.7
500	1.7			

Table of Load Capacity by Speed and Acceleration/Deceleration

24 VDC

[When installed vertically]

EBR-04G

Screw lead 6

Speed (mm/s)	Straight	Left/Right/ Bottom
	Acceleration/ deceleration (G)	
	0.3	0.3
0	10.0	8.3
50	10.0	8.3
100	10.0	6.7
150	4.2	4.2
175	2.5	0.8
200	2.5	
225	0.8	

Screw lead 12

Speed (mm/s)	Straight	Left/Right/ Bottom
	Acceleration/ deceleration (G)	
	0.3	0.3
0	2.9	2.9
100	2.9	2.9
200	2.9	2.9
250	1.7	0.8
300	1.7	

EBR-05G

Screw lead 2

Speed (mm/s)	Straight	Left/Right/ Bottom
	Acceleration/ deceleration (G)	
	0.3	0.3
0	23.3	23.3
20	23.3	23.3
25	23.3	23.3
40	23.3	23.3
50	23.3	16.7
60	23.3	16.7
70	18.3	11.7
90	11.7	3.3

Screw lead 5

Speed (mm/s)	Straight	Left/Right/ Bottom
	Acceleration/ deceleration (G)	
	0.3	0.3
0	14.0	14.0
50	14.0	14.0
100	12.5	10.0
150	7.5	5.8
200	4.2	2.5
250	2.5	

Screw lead 10

Speed (mm/s)	Straight	Left/Right/ Bottom
	Acceleration/ deceleration (G)	
	0.3	0.3
0	7.0	6.7
100	7.0	6.7
200	5.8	5.0
250	1.7	0.4
300	1.7	

Screw lead 20

Speed (mm/s)	Straight	Left/Right/ Bottom
	Acceleration/ deceleration (G)	
	0.3	0.3
0	2.9	1.7
100	2.9	1.7
300	2.9	1.7
400	2.1	1.3
500	1.3	

EBR-08G

Screw lead 5

Speed (mm/s)	Straight	Left/Right/ Bottom
	Acceleration/ deceleration (G)	
	0.3	0.3
6	55.0	55.0
25	55.0	55.0
50	35.0	35.0
75	21.7	21.7
100	3.3	3.3
125	3.3	3.3

Screw lead 10

Speed (mm/s)	Straight	Left/Right/ Bottom
	Acceleration/ deceleration (G)	
	0.3	0.3
12	23.3	20.0
50	23.3	20.0
100	8.3	8.3
150	1.7	1.7
200	1.3	1.3
225	1.3	0.8
250	1.3	

Screw lead 20

Speed (mm/s)	Straight	Left/Right/ Bottom
	Acceleration/ deceleration (G)	
	0.3	0.3
25	10.0	8.3
100	10.0	8.3
200	6.7	6.7
300	1.7	1.7

The table below lists the maximum load capacity during acceleration/ deceleration and the maximum speed at which operation is possible. Refer to the model that satisfies the required operation conditions.

EBS
(With motor)

EBR
(With motor)

ECR
(Controller)

ECG-A
(Controller)

Safety
precautions