

# EBR-L

Rod with built-in guide

Servo motor compatible  
electric actuator  
Motorless specification



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EBS

EBR

ETS

ETS Multi-Axis

ECS

ETV

ECV

EKS

EBS

EBR

ETS

ECS

ECS

Safety  
precautions

| Series variation        |                                                                                     |             |                           |                 |                 |                         |          |          |     |     |  |
|-------------------------|-------------------------------------------------------------------------------------|-------------|---------------------------|-----------------|-----------------|-------------------------|----------|----------|-----|-----|--|
| Type                    | Model No.                                                                           |             | Applicable motor size (W) | Body width (mm) | Screw lead (mm) | Max. load capacity (kg) |          |          |     |     |  |
|                         |                                                                                     |             |                           |                 |                 | Horizontal<br>*1        | Vertical | 50 mm    | 100 | 150 |  |
| Rod with built-in guide |    | EBR-04L*-06 | 50                        | 44              | 6               | 20                      | 5        | 300 mm/s |     |     |  |
|                         |                                                                                     | EBR-04L*-12 |                           |                 | 12              | 12                      | 2        | 600      |     |     |  |
|                         |   | EBR-05L*-02 | 100                       | 54              | 2               | 30                      | 10       | 100      |     |     |  |
|                         |                                                                                     | EBR-05L*-05 |                           |                 | 5               | 30                      | 10       | 250      |     |     |  |
|                         |                                                                                     | EBR-05L*-10 |                           |                 | 10              | 15                      | 5        | 500      |     |     |  |
|                         |                                                                                     | EBR-05L*-20 |                           |                 | 20              | 10                      | 2.5      | 1000     |     |     |  |
|                         |  | EBR-08L*-05 | 200                       | 82              | 5               | 50                      | 15       | 250      |     |     |  |
|                         |                                                                                     | EBR-08L*-10 |                           |                 | 10              | 30                      | 8        | 500      |     |     |  |
|                         |                                                                                     | EBR-08L*-20 |                           |                 | 20              | 12                      | 2.5      | 1000     |     |     |  |
|                         |  | EBR-12L*-05 | 400                       | 120             | 5               | 110                     | 33       | 250      |     |     |  |
|                         |                                                                                     | EBR-12L*-10 |                           |                 | 10              | 88                      | 22       | 500      |     |     |  |
|                         |                                                                                     | EBR-12L*-20 |                           |                 | 20              | 40                      | 10       | 1000     |     |     |  |
|                         |                                                                                     | EBR-12L*-32 |                           |                 | 32              | 30                      | 8        | 1600     |     |     |  |

| Servo motor compatible |     |     |               |     |     |     |     |     |     | Stepper motor compatible |     |  |  | Safety<br>precautions |
|------------------------|-----|-----|---------------|-----|-----|-----|-----|-----|-----|--------------------------|-----|--|--|-----------------------|
| EBS                    | EBR | ETS | ETSMulti-Axis | ECS | ETV | ECV | EKS | EBS | EBR | ETS                      | ECS |  |  |                       |

\*3:  shows the positioning time. Maximum stroke when installed horizontally and operated at max. speed and max. acceleration/deceleration. Note that this is not the value at maximum load capacity.

How to order

Rod with built-in guide

EBR - 05 L E - 00 - 02 0050 N NN - M 1 N N

A

B

C

D

E

F

G

H

I

J

| A Body size |                   |
|-------------|-------------------|
| 04          | Body width 44 mm  |
| 05          | Body width 54 mm  |
| 08          | Body width 82 mm  |
| 12          | Body width 120 mm |

| B Motor |      |
|---------|------|
| L       | None |

| C Motor mounting direction |                   |
|----------------------------|-------------------|
| E                          | Straight mounting |
| R                          | Right mounting    |
| D                          | Bottom mounting   |
| L                          | Left mounting     |

| D Screw lead |       |
|--------------|-------|
| 02           | 2 mm  |
| 05           | 5 mm  |
| 06           | 6 mm  |
| 10           | 10 mm |
| 12           | 12 mm |
| 20           | 20 mm |
| 32           | 32 mm |

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

| F Brake |      |
|---------|------|
| N       | None |

| G Mounted motor specification |                                        |
|-------------------------------|----------------------------------------|
| M                             | Refer to the list on the page at right |
| Y                             |                                        |
| P                             |                                        |
| F                             |                                        |

| J Limit sensor |      |
|----------------|------|
| N              | None |
| B              | Yes  |

| I Origin sensor |      |
|-----------------|------|
| N               | None |
| C               | Yes  |

| H Motor size |       |
|--------------|-------|
| H            | 50 W  |
| 1            | 100 W |
| 2            | 200 W |
| 4            | 400 W |

\*This product is composed of an actuator (and motor mounting parts) only; there is no motor attached. The user must prepare, mount, and adjust the motor and driver.

Servo motor compatible

Stepper motor compatible

Safety precautions

## List of servo motors recommended for mounting

| Code | Manufacturer                    | Series      | 50 W               | 100 W              |
|------|---------------------------------|-------------|--------------------|--------------------|
| M    | Mitsubishi Electric Corporation | MELSERVO J4 | HG-KR053           | HG-KR13            |
|      |                                 | MELSERVO J5 | HG-KT_053W         | HK-KT_13W          |
|      | Delta Electronics Co., Ltd.     | ECMA-C      | ECMA-C1040F        | ECMA-C10401        |
|      | Sanyo Corporation, Ltd.         | SANMOTION R | R2□A04005          | R2□A04010          |
| Y    | YASKAWA Electric Corporation    | Σ-V         | SGMJV-A5           | SGMJV-01           |
|      |                                 | Σ-7         | SGM7J-A5           | SGM7J-01           |
|      | Keyence Corporation             | SV          | SV-□005            | SV-□010            |
|      |                                 | SV2         | SV2-□005           | SV2-□010           |
| P    | Panasonic Corporation           | MINAS A5    | MSMD5A             | MSMD01             |
|      |                                 | MINAS A6    | MSMF5A             | MSMF01             |
| M    | OMRON Corporation               | G5          | R88M-K05030        | R88M-K10030        |
|      |                                 | 1S          | R88M-1M05030       | R88M-1M10030       |
|      | Fuji Electric Co., Ltd.         | ALPHA7 GYS  | GYS500D7-□B2□      | GYS101D7-□B2□      |
|      |                                 | ALPHA7 GYB  | -                  | -                  |
| F    | FANUC CORPORATION               | βiS-B       | A06B-0111-B1       | A06B-0112-B1       |
| P    | Bosch Rexroth AG                | MSM         | MSM019A            | MSM019B            |
| M    | Rockwell Automation, Inc.       | TLP         | TLP-A046-005-DKA□2 | TLP-A046-010-DKA□2 |
|      | SIEMENS AG                      | 1FK2 *1     | 1FK2102-0AG0       | 1FK2102-1AG0       |

| Code | Manufacturer                    | Series      | 200 W              | 400 W              |
|------|---------------------------------|-------------|--------------------|--------------------|
| M    | Mitsubishi Electric Corporation | MELSERVO J4 | HG-KR23            | HG-KR43            |
|      |                                 | MELSERVO J5 | HK-KT_23W          | HK-KT_43W          |
|      | Delta Electronics Co., Ltd.     | ECMA-C      | ECMA-C10602        | ECMA-C10604        |
|      | Sanyo Corporation, Ltd.         | SANMOTION R | R2□A06020          | R2□A06040          |
| Y    | YASKAWA Electric Corporation    | Σ-V         | SGMJV-02           | SGMJV-04           |
|      |                                 | Σ-7         | SGM7J-02           | SGM7J-04           |
|      | Keyence Corporation             | SV          | SV-□020            | SV-□040            |
|      |                                 | SV2         | SV2-□020           | SV2-□040           |
| P    | Panasonic Corporation           | MINAS A5    | MSMD02             | MSMD04             |
|      |                                 | MINAS A6    | MSMF02             | MSMF04             |
|      | OMRON Corporation               | G5          | R88M-K20030        | R88M-K40030        |
|      |                                 | 1S          | R88M-1M20030       | R88M-1M40030       |
| M    | Fuji Electric Co., Ltd.         | ALPHA7 GYS  | GYS201D7-□B2□      | GYS401D7-□B2□      |
|      |                                 | ALPHA7 GYB  | GYB201D7-□B2□      | GYB401D7-□B2□      |
| F    | FANUC CORPORATION               | βiS-B       | A06B-2115-B1       | -                  |
| P    | Bosch Rexroth AG                | MSM         | MSM031B            | MSM031C            |
| M    | Rockwell Automation, Inc.       | TLP         | TLP-A070-020-DKA□2 | TLP-A070-040-DKA□2 |
|      | SIEMENS AG                      | 1FK2 *1     | 1FK2203-2AG0       | 1FK2203-4AG0       |

\*Contact CKD for mounting other than the above motors and products of other motor manufacturers.

\*1 The servo motor is subject to the regulations of Export Trade Control Order Appendix Table 1 Item 7 (8), and is applicable with regard to its specifications. (as of January 2021)



Electric actuator (motorless) Rod with built-in guide

# EBR-04LE

Straight motor mounting

● Servo motor size: 50 W

RoHS

## How to order

EBR - 04 L E - 00 - 06 0050 N NN - M H N N

**A** Body size  
04 Body width 44 mm

**B** Motor  
L None

**C** Motor mounting direction  
E Straight mounting

**D** Screw lead  
06 6 mm  
12 12 mm

**E** Stroke length  
0050 50 mm  
to (In 50 mm increments)  
0400 400 mm

**F** Brake  
N None

**G** Mounted motor specification  
M Select the mounted motor specification from the table at right.  
Y  
P  
F

**H** Motor size  
H 50 W

**I** Origin sensor \*1  
N None  
C Yes

**J** Limit sensor \*1  
N None  
B Yes

| Manufacturer                    | 50 W |
|---------------------------------|------|
| Mitsubishi Electric Corporation | M    |
| Delta Electronics Co., Ltd.     | M    |
| Sanyo Denki Co., Ltd.           | M    |
| YASKAWA Electric Corporation    | Y    |
| Keyence Corporation             | Y    |
| Panasonic Corporation           | P    |
| OMRON Corporation               | M    |
| Fuji Electric Co., Ltd.         | M    |
| FANUC CORPORATION               | F    |
| Bosch Rexroth AG                | P    |
| Rockwell Automation, Inc.       | M    |
| SIEMENS AG                      | M    |

\*1 Origin sensor and limit sensor are a set. As it is both-or-nothing, select "None" for both.

\*Refer to page 49 for the motor model No.

## Specifications

|                                         |                                                             |     |
|-----------------------------------------|-------------------------------------------------------------|-----|
| Applicable motor sizes                  | 50 W servo motor                                            |     |
| Drive method                            | Ball screw $\phi$ 10                                        |     |
| Stroke length mm                        | 50 to 400                                                   |     |
| Screw lead mm                           | 6                                                           | 12  |
| Max. load capacity kg                   |                                                             |     |
| *1 Horizontal                           | 20                                                          | 12  |
| Vertical                                | 5                                                           | 2   |
| Max. speed mm/s                         | 300                                                         | 600 |
| Rated thrust *1 N                       | 141                                                         | 71  |
| Repeatability mm                        | $\pm 0.01$                                                  |     |
| Lost motion mm                          | 0.1 or less                                                 |     |
| Operating ambient temperature, humidity | 0 to 40°C (no freezing)<br>35 to 80% RH (no condensation)   |     |
| Storage ambient temperature, humidity   | -10 to 50°C (no freezing)<br>35 to 80% RH (no condensation) |     |
| Atmosphere                              | No corrosive gas, explosive gas, or dust                    |     |

\*Refer to pages 76 to 77 for the allowable applied load for the overhang amount.

\*1 Rated thrust and max. load capacity are guideline values assuming that the motor mounted will output the rated torque.

## Stroke and max. speed

(mm/s)

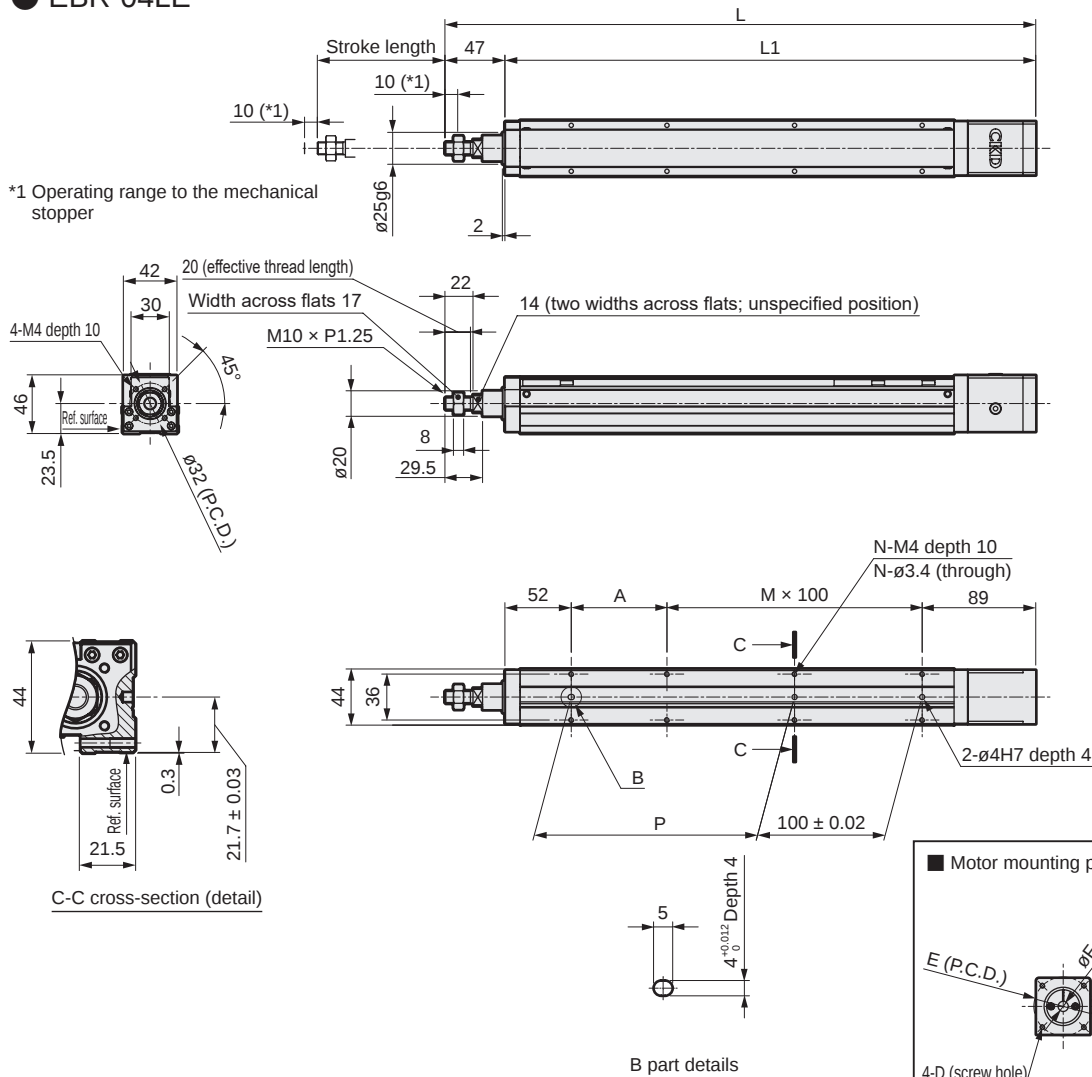
| Stroke length | 50 to 250 | 300 | 350 | 400 |
|---------------|-----------|-----|-----|-----|
| Screw lead    |           |     |     |     |
| 6             | 300       | 250 |     |     |
| 12            | 600       | 510 |     |     |

\*Max. speed is when the motor mounted by the customer can output rotation speed of 3000 rpm.

The max. speed is restricted by the stroke. Do not move at speeds beyond the limit.

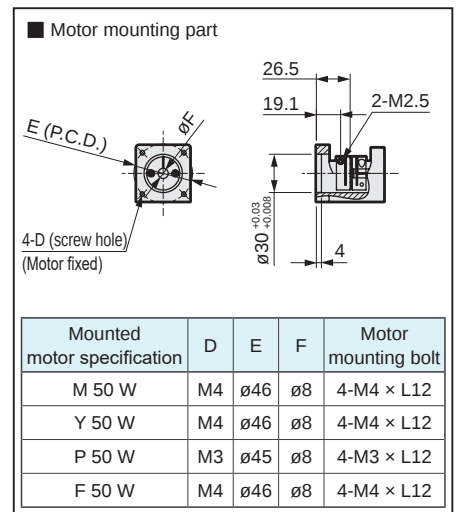
### Dimensions Straight motor mounting

#### EBR-04LE



\*When the stroke is 50 mm, in some cases sensors must be attached on both sides.

| Stroke code        | 0050 | 0100 | 0150 | 0200 | 0250 | 0300 | 0350 | 0400 |
|--------------------|------|------|------|------|------|------|------|------|
| Stroke length (mm) | 50   | 100  | 150  | 200  | 250  | 300  | 350  | 400  |
| L                  | 313  | 363  | 413  | 463  | 513  | 563  | 613  | 663  |
| L1                 | 266  | 316  | 366  | 416  | 466  | 516  | 566  | 616  |
| 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)        | 1.1  | 1.2  | 1.4  | 1.6  | 1.7  | 1.9  | 2.0  | 2.2  |



### List of attachments

#### [Motor mounting parts]

| Mounted motor specification | Coupling              | Motor mounting bolt |          |
|-----------------------------|-----------------------|---------------------|----------|
|                             |                       | Size                | Quantity |
| M                           | Assembled at shipment | M4                  | 4        |
| Y                           |                       | M4                  | 4        |
| P                           |                       | M3                  | 4        |
| F                           |                       | M4                  | 4        |

#### [Origin sensor, limit sensor]

| Sensor       |           |                   |
|--------------|-----------|-------------------|
| Manufacturer | Model     | Included quantity |
| KITA         | KT-32N-2M | 3                 |

\*Refer to page 80 for sensor specifications.



Electric actuator (motorless) Rod with built-in guide

# EBR-04L\*

Motor side mounting (left, right, bottom)

● Servo motor size: 50 W

RoHS

## How to order

EBR - 04 L R - 00 - 06 0050 N NN - M H N N

**A** Body size  
04 Body width 44 mm

**B** Motor  
L None

**C** Motor mounting direction  
R Right mounting  
D Bottom mounting  
L Left mounting

**D** Screw lead  
06 6 mm  
12 12 mm

**E** Stroke length  
0050 50 mm  
to (In 50 mm increments)  
0400 400 mm

**F** Brake  
N None

**G** Mounted motor specification  
M Select the mounted motor specification from the table at right.  
Y  
P  
F

**H** Motor size  
H 50 W

**I** Origin sensor \*1  
N None  
C Yes

**J** Limit sensor \*1  
N None  
B Yes

| Manufacturer                    | 50 W |
|---------------------------------|------|
| Mitsubishi Electric Corporation | M    |
| Delta Electronics Co., Ltd.     | M    |
| Sanyo Denki Co., Ltd.           | M    |
| YASKAWA Electric Corporation    | Y    |
| Keyence Corporation             | Y    |
| Panasonic Corporation           | P    |
| OMRON Corporation               | M    |
| Fuji Electric Co., Ltd.         | M    |
| FANUC CORPORATION               | F    |
| Bosch Rexroth AG                | P    |
| Rockwell Automation, Inc.       | M    |
| SIEMENS AG                      | M    |

\*1 Origin sensor and limit sensor are a set. As it is both-or-nothing, select "None" for both.

\*Refer to page 49 for the motor model No.

## Specifications

|                                         |                                                             |          |
|-----------------------------------------|-------------------------------------------------------------|----------|
| Applicable motor sizes                  | 50 W servo motor                                            |          |
| Drive method                            | Ball screw $\phi 10$                                        |          |
| Stroke length mm                        | 50 to 400                                                   |          |
| Screw lead mm                           | 6                                                           | 12       |
| Max. load capacity kg                   | Horizontal                                                  | Vertical |
| *1                                      | 20                                                          | 5        |
| Max. speed mm/s                         | 300                                                         | 600      |
| Rated thrust *1 N                       | 141                                                         | 71       |
| Repeatability mm                        | $\pm 0.01$                                                  |          |
| Lost motion mm                          | 0.1 or less                                                 |          |
| Operating ambient temperature, humidity | 0 to 40°C (no freezing)<br>35 to 80% RH (no condensation)   |          |
| Storage ambient temperature, humidity   | -10 to 50°C (no freezing)<br>35 to 80% RH (no condensation) |          |
| Atmosphere                              | No corrosive gas, explosive gas, or dust                    |          |

\*Refer to pages 76 to 77 for the allowable applied load for the overhang amount.

\*1 Rated thrust and max. load capacity are guideline values assuming that the motor mounted will output the rated torque.

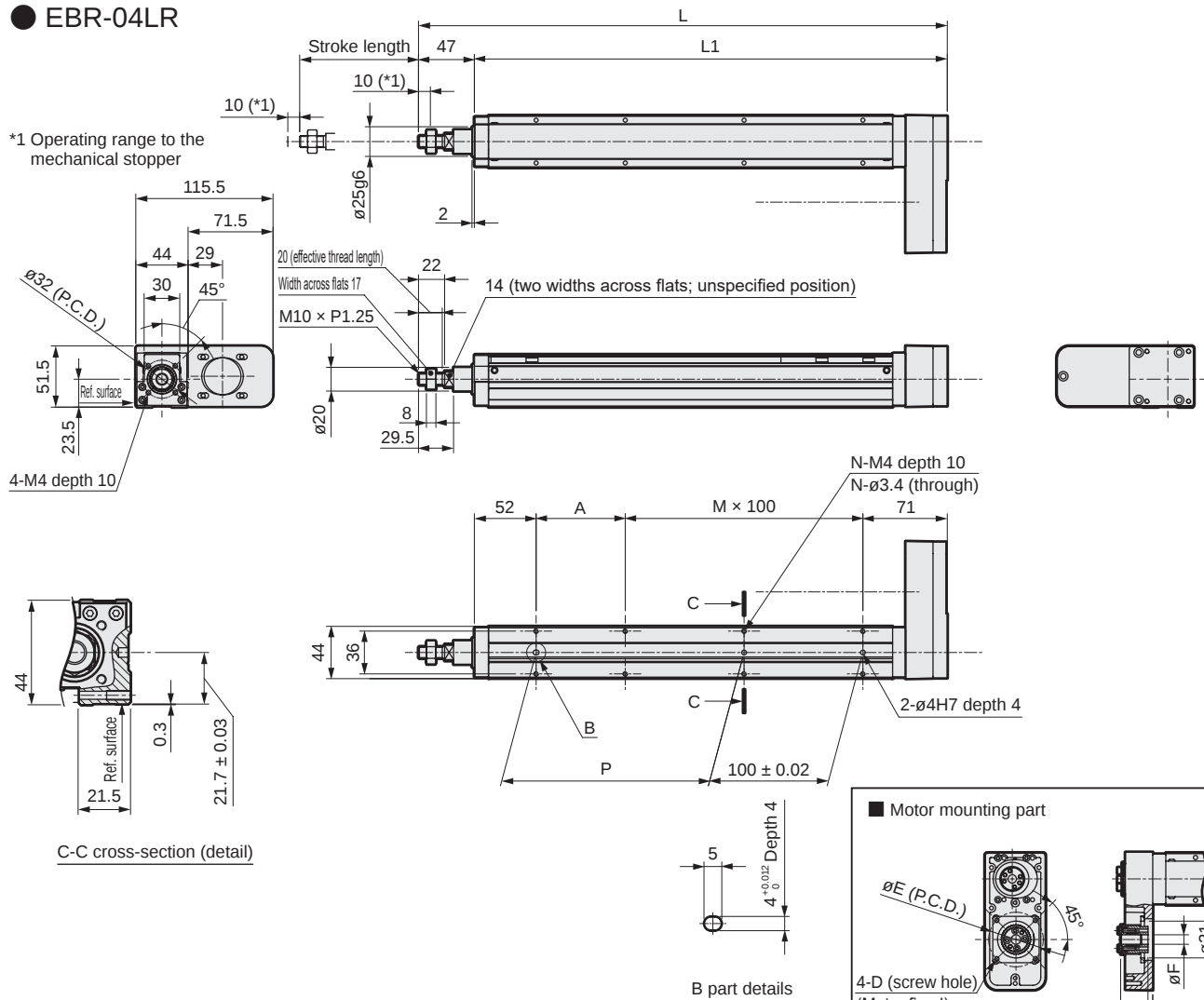
## Stroke and max. speed

|               |            | (mm/s)    |     |     |     |
|---------------|------------|-----------|-----|-----|-----|
| Stroke length | Screw lead | 50 to 250 | 300 | 350 | 400 |
| 6             |            | 300       |     | 250 |     |
| 12            |            | 600       |     | 510 |     |

\*Max. speed is when the motor mounted by the customer can output rotation speed of 3000 rpm.  
The max. speed is restricted by the stroke. Do not move at speeds beyond the limit.

## Dimensions Motor right-side mounting

● EBR-04LR



\*When the stroke is 50 mm, in some cases sensors must be attached on both sides.

| Stroke code        | 0050 | 0100 | 0150 | 0200 | 0250 | 0300 | 0350 | 0400 |
|--------------------|------|------|------|------|------|------|------|------|
| Stroke length (mm) | 50   | 100  | 150  | 200  | 250  | 300  | 350  | 400  |
| L                  | 295  | 345  | 395  | 445  | 495  | 545  | 595  | 645  |
| L1                 | 248  | 298  | 348  | 398  | 448  | 498  | 548  | 598  |
| 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)        | 1.3  | 1.5  | 1.6  | 1.8  | 1.9  | 2.1  | 2.2  | 2.4  |

| Mounted motor specification | D  | E   | F  | Motor mounting bolt |
|-----------------------------|----|-----|----|---------------------|
| M 50 W                      | M4 | ø46 | ø8 | 4-M4 × L12          |
| Y 50 W                      | M4 | ø46 | ø8 | 4-M4 × L12          |
| P 50 W                      | M3 | ø45 | ø8 | 4-M3 × L12          |
| F 50 W                      | M4 | ø46 | ø8 | 4-M4 × L12          |

## List of attachments

[Motor mounting parts]

| Mounted motor specification | Timing belt, pulley  | Motor mounting bolt |          |
|-----------------------------|----------------------|---------------------|----------|
|                             |                      | Size                | Quantity |
| M                           | Included at shipment | M4                  | 4        |
| Y                           |                      | M4                  | 4        |
| P                           |                      | M3                  | 4        |
| F                           |                      | M4                  | 4        |

[Origin sensor, limit sensor]

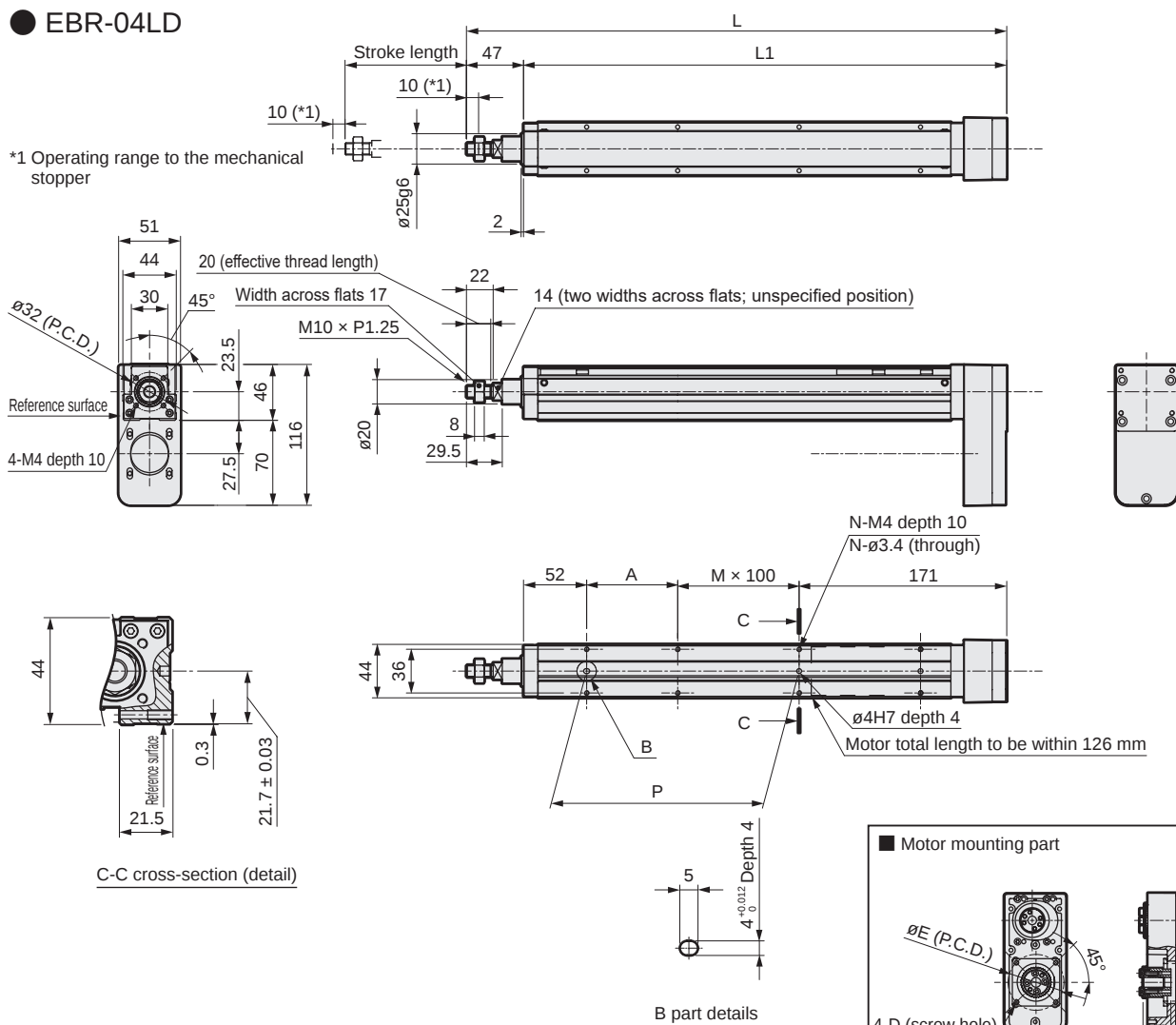
| Sensor       |           |                   |
|--------------|-----------|-------------------|
| Manufacturer | Model     | Included quantity |
| KITA         | KT-32N-2M | 3                 |

\*Refer to page 80 for sensor specifications.

# EBR-04L\*

## Dimensions Motor bottom mounting

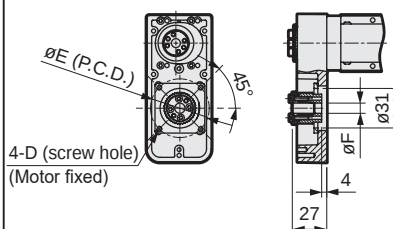
● EBR-04LD



\*When the stroke is 50 mm, in some cases sensors must be attached on both sides.

| Stroke code        | 0050 | 0100 | 0150 | 0200 | 0250 | 0300 | 0350 | 0400 |
|--------------------|------|------|------|------|------|------|------|------|
| Stroke length (mm) | 50   | 100  | 150  | 200  | 250  | 300  | 350  | 400  |
| L                  | 295  | 345  | 395  | 445  | 495  | 545  | 595  | 645  |
| L1                 | 248  | 298  | 348  | 398  | 448  | 498  | 548  | 598  |
| A                  | 25   | 75   | 25   | 75   | 25   | 75   | 25   | 75   |
| M                  | 0    | 0    | 1    | 1    | 2    | 2    | 3    | 3    |
| N                  | 4    | 4    | 6    | 6    | 8    | 8    | 10   | 10   |
| P                  | 25   | 75   | 125  | 175  | 225  | 275  | 325  | 375  |
| Weight (kg)        | 1.3  | 1.5  | 1.6  | 1.8  | 1.9  | 2.1  | 2.2  | 2.4  |

■ Motor mounting part



| Mounted<br>motor specification | D  | E   | F  | Motor<br>mounting bolt |
|--------------------------------|----|-----|----|------------------------|
| M 50 W                         | M4 | ø46 | ø8 | 4-M4 × L12             |
| Y 50 W                         | M4 | ø46 | ø8 | 4-M4 × L12             |
| P 50 W                         | M3 | ø45 | ø8 | 4-M3 × L12             |
| F 50 W                         | M4 | ø46 | ø8 | 4-M4 × L12             |

## List of attachments

[Motor mounting parts]

| Mounted motor specification | Timing belt, pulley  | Motor mounting bolt |          |
|-----------------------------|----------------------|---------------------|----------|
|                             |                      | Size                | Quantity |
| M                           | Included at shipment | M4                  | 4        |
| Y                           |                      | M4                  | 4        |
| P                           |                      | M3                  | 4        |
| F                           |                      | M4                  | 4        |

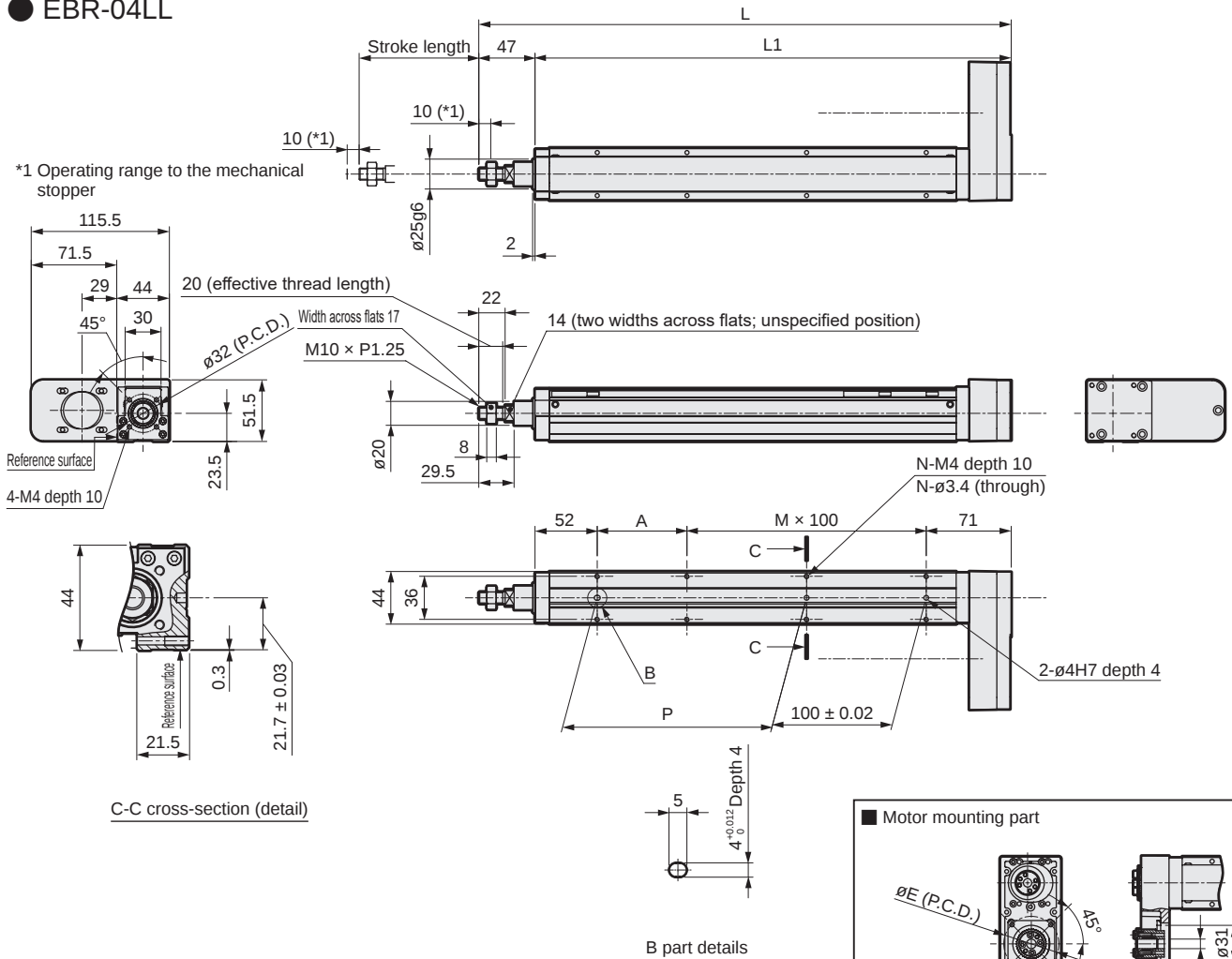
[Origin sensor, limit sensor]

| Sensor       |           |                   |
|--------------|-----------|-------------------|
| Manufacturer | Model     | Included quantity |
| KITA         | KT-32N-2M | 3                 |

\*Refer to page 80 for sensor specifications.

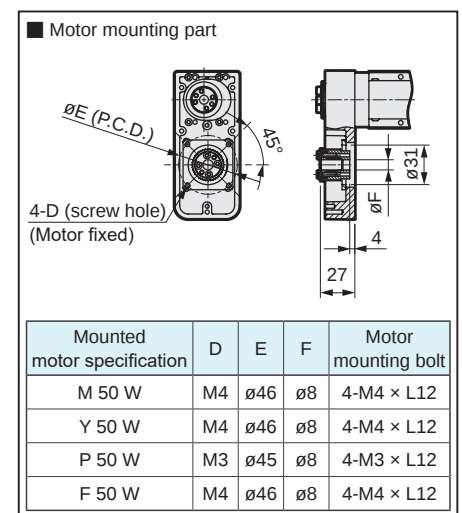
## Dimensions Motor left-side mounting

## ● EBR-04LL



\*When the stroke is 50 mm, in some cases sensors must be attached on both sides.

| Stroke code        | 0050 | 0100 | 0150 | 0200 | 0250 | 0300 | 0350 | 0400 |
|--------------------|------|------|------|------|------|------|------|------|
| Stroke length (mm) | 50   | 100  | 150  | 200  | 250  | 300  | 350  | 400  |
| L                  | 295  | 345  | 395  | 445  | 495  | 545  | 595  | 645  |
| L1                 | 248  | 298  | 348  | 398  | 448  | 498  | 548  | 598  |
| 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)        | 1.3  | 1.5  | 1.6  | 1.8  | 1.9  | 2.1  | 2.2  | 2.4  |



## List of attachments

[Motor mounting parts]

| Mounted motor specification | Timing belt, pulley  | Motor mounting bolt |          |
|-----------------------------|----------------------|---------------------|----------|
|                             |                      | Size                | Quantity |
| M                           | Included at shipment | M4                  | 4        |
| Y                           |                      | M4                  | 4        |
| P                           |                      | M3                  | 4        |
| F                           |                      | M4                  | 4        |

[Origin sensor, limit sensor]

| Sensor       |           |                   |
|--------------|-----------|-------------------|
| Manufacturer | Model     | Included quantity |
| KITA         | KT-32N-2M | 3                 |

\*Refer to page 80 for sensor specifications.



Electric actuator (motorless) Rod with built-in guide

# EBR-05LE

Straight motor mounting

● Servo motor size: 100 W

RoHS

## How to order

EBR - 05 L E - 00 - 02 0050 N NN - M 1 N N

**A** Body size  
05 Body width 54 mm

**B** Motor  
L None

**C** Motor mounting method  
E Straight mounting

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

**E** Stroke length  
0050 50 mm  
to 0400 (In 50 mm increments) 400 mm

**F** Brake  
N None

**G** Mounted motor specification  
M Select the mounted motor specification from the table at right.  
Y  
P  
F

**H** Motor size  
1 100 W

**I** Origin sensor \*1  
N None  
C Yes

**J** Limit sensor \*1  
N None  
B Yes

| Manufacturer                    | 100 W |
|---------------------------------|-------|
| Mitsubishi Electric Corporation | M     |
| Delta Electronics Co., Ltd.     | M     |
| Sanyo Denki Co., Ltd.           | M     |
| YASKAWA Electric Corporation    | Y     |
| Keyence Corporation             | Y     |
| Panasonic Corporation           | P     |
| OMRON Corporation               | M     |
| Fuji Electric Co., Ltd.         | M     |
| FANUC CORPORATION               | F     |
| Bosch Rexroth AG                | P     |
| Rockwell Automation, Inc.       | M     |
| SIEMENS AG                      | M     |

\*1 Origin sensor and limit sensor are available as a set. As it is both-or-nothing, select "None" for both.

\*Refer to page 49 for the motor model No.

## Specifications

|                                         |                                                             |     |     |      |
|-----------------------------------------|-------------------------------------------------------------|-----|-----|------|
| Applicable motor sizes                  | 100 W servo motor                                           |     |     |      |
| Drive method                            | Ball screw $\phi 12$                                        |     |     |      |
| Stroke length mm                        | 50 to 400                                                   |     |     |      |
| Screw lead mm                           | 2                                                           | 5   | 10  | 20   |
| Max. load capacity kg                   | *1                                                          | 30  | 30  | 15   |
| Horizontal                              |                                                             |     |     |      |
| Vertical                                | 10                                                          | 10  | 5   | 2.5  |
| Max. speed mm/s                         | 100                                                         | 250 | 500 | 1000 |
| Rated thrust *1 N                       | 854                                                         | 341 | 170 | 85   |
| Repeatability mm                        | $\pm 0.01$                                                  |     |     |      |
| Lost motion mm                          | 0.1 or less                                                 |     |     |      |
| Operating ambient temperature, humidity | 0 to 40°C (no freezing)<br>35 to 80% RH (no condensation)   |     |     |      |
| Storage ambient temperature, humidity   | -10 to 50°C (no freezing)<br>35 to 80% RH (no condensation) |     |     |      |
| Atmosphere                              | No corrosive gas, explosive gas, or dust                    |     |     |      |

\*Refer to pages 76 to 77 for the allowable applied load for the overhang amount.

\*1 Rated thrust and max. load capacity are guideline values assuming that the motor mounted will output the rated torque.

## Stroke and max. speed

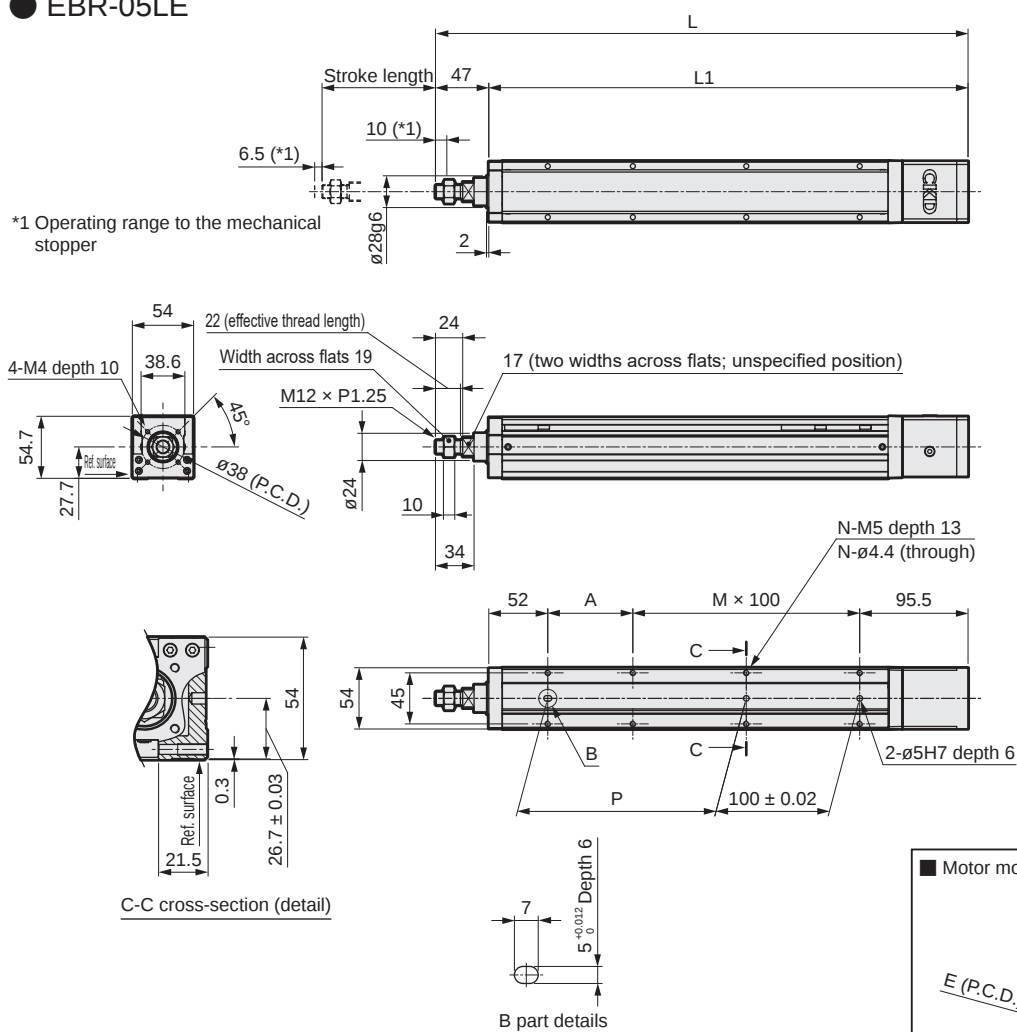
|               |            | (mm/s)    |            |
|---------------|------------|-----------|------------|
| Stroke length | Screw lead | 50 to 250 | 300 to 400 |
|               | 2          | 100       | 85         |
|               | 5          | 250       | 200        |
|               | 10         | 500       | 400        |
|               | 20         | 1000      | 850        |

\*Max. speed is when the motor mounted by the customer can output rotation speed of 3000 rpm.

The max. speed is restricted by the stroke. Do not move at speeds beyond the limit.

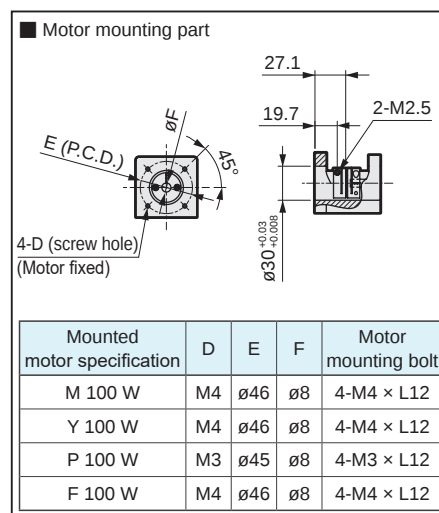
## Dimensions Straight motor mounting

## ● EBR-05LE



\*When the stroke is 50 mm, in some cases sensors must be attached on both sides.

| Stroke code        | 0050  | 0100  | 0150  | 0200  | 0250  | 0300  | 0350  | 0400  |
|--------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Stroke length (mm) | 50    | 100   | 150   | 200   | 250   | 300   | 350   | 400   |
| L                  | 319.5 | 369.5 | 419.5 | 469.5 | 519.5 | 569.5 | 619.5 | 669.5 |
| L1                 | 272.5 | 322.5 | 372.5 | 422.5 | 472.5 | 522.5 | 572.5 | 622.5 |
| 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)        | 1.7   | 1.9   | 2.1   | 2.3   | 2.5   | 2.7   | 2.9   | 3.0   |



## List of attachments

## [Motor mounting parts]

| Mounted motor specification | Coupling              | Motor mounting bolt |          |
|-----------------------------|-----------------------|---------------------|----------|
|                             |                       | Size                | Quantity |
| M                           | Assembled at shipment | M4                  | 4        |
| Y                           |                       | M4                  | 4        |
| P                           |                       | M3                  | 4        |
| F                           |                       | M4                  | 4        |

## [Origin sensor, limit sensor]

| Manufacturer | Model     | Included quantity |
|--------------|-----------|-------------------|
| KITA         | KT-32N-2M | 3                 |

\*Refer to page 80 for sensor specifications.



Electric actuator (motorless) Rod with built-in guide

# EBR-05L\*

Motor side mounting (left, right, bottom)

● Servo motor size: 100 W

RoHS

## How to order

**EBR - 05 L R - 00 - 02 0050 N NN - M 1 N N**

**A Body size**  
05 Body width 54 mm

**B Motor**  
L None

**C Motor mounting direction**  
R Right mounting  
D Bottom mounting  
L Left mounting

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

**E Stroke length**  
0050 50 mm  
to 0400 (In 50 mm increments) 400 mm

**F Brake**  
N None

**G Mounted motor specification**  
M Select the mounted motor specification from the table at right.  
Y  
P  
F

**H Motor size**  
1 100 W

**I Origin sensor \*1**  
N None  
C Yes

**J Limit sensor \*1**  
N None  
B Yes

| Manufacturer                    | 100 W |
|---------------------------------|-------|
| Mitsubishi Electric Corporation | M     |
| Delta Electronics Co., Ltd.     | M     |
| Sanyo Denki Co., Ltd.           | M     |
| YASKAWA Electric Corporation    | Y     |
| Keyence Corporation             | Y     |
| Panasonic Corporation           | P     |
| OMRON Corporation               | M     |
| Fuji Electric Co., Ltd.         | M     |
| FANUC CORPORATION               | F     |
| Bosch Rexroth AG                | P     |
| Rockwell Automation, Inc.       | M     |
| SIEMENS AG                      | M     |

\*1 Origin sensor and limit sensor are available as a set. As it is both-or-nothing, select "None" for both.

\*Refer to page 49 for the motor model No.

## Specifications

|                                         |                                                             |     |     |      |
|-----------------------------------------|-------------------------------------------------------------|-----|-----|------|
| Applicable motor sizes                  | 100 W servo motor                                           |     |     |      |
| Drive method                            | Ball screw $\phi 12$                                        |     |     |      |
| Stroke length mm                        | 50 to 400                                                   |     |     |      |
| Screw lead                              | 2                                                           | 5   | 10  | 20   |
| Max. load capacity kg                   | Horizontal                                                  | 30  | 30  | 15   |
| *1                                      | Vertical                                                    | 10  | 10  | 5    |
| Max. speed mm/s                         | 100                                                         | 250 | 500 | 1000 |
| Rated thrust *1 N                       | 854                                                         | 341 | 170 | 85   |
| Repeatability mm                        | $\pm 0.01$                                                  |     |     |      |
| Lost motion mm                          | 0.1 or less                                                 |     |     |      |
| Operating ambient temperature, humidity | 0 to 40°C (no freezing)<br>35 to 80% RH (no condensation)   |     |     |      |
| Storage ambient temperature, humidity   | -10 to 50°C (no freezing)<br>35 to 80% RH (no condensation) |     |     |      |
| Atmosphere                              | No corrosive gas, explosive gas, or dust                    |     |     |      |

\*Refer to pages 76 to 77 for the allowable applied load for the overhang amount.

\*1 Rated thrust and max. load capacity are guideline values assuming that the motor mounted will output the rated torque.

## Stroke and max. speed

|               |      | (mm/s)    |     |     |     |
|---------------|------|-----------|-----|-----|-----|
| Stroke length | Lead | 50 to 250 | 300 | 350 | 400 |
| 2             |      | 100       |     | 85  |     |
| 5             |      | 250       |     | 200 |     |
| 10            |      | 500       |     | 400 |     |
| 20            |      | 1000      |     | 850 |     |

\*Max. speed is when the motor mounted by the customer can output rotation speed of 3000 rpm.

The max. speed is restricted by the stroke. Do not move at speeds beyond the limit.

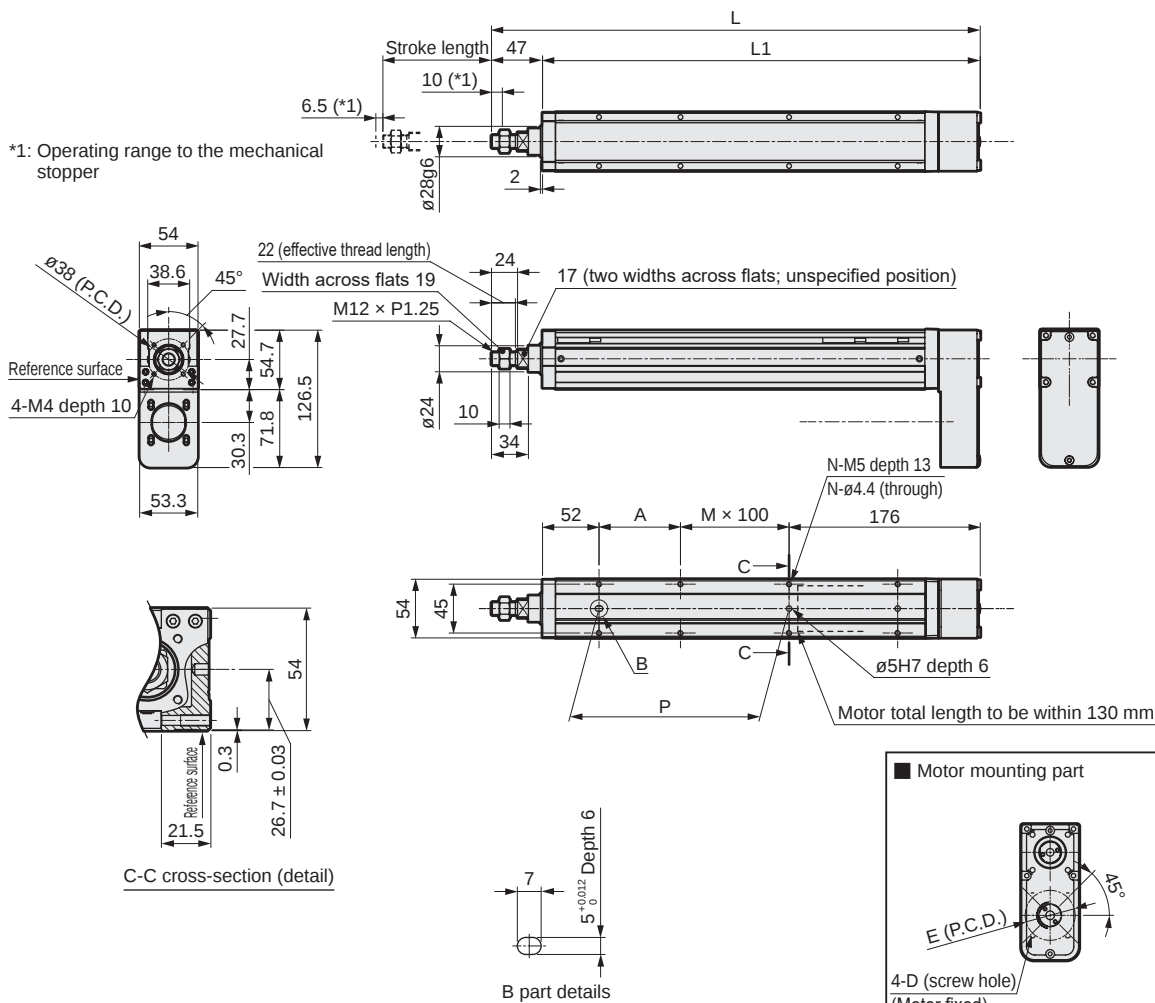
Use Lead 2 at 0.5 G or less.



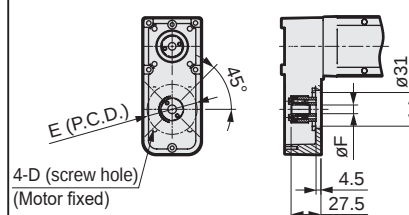
# EBR-05L\*

## Dimensions Motor bottom mounting

### ● EBR-05LD



#### ■ Motor mounting part



| Mounted motor specification | D  | E   | F  | Motor screw |
|-----------------------------|----|-----|----|-------------|
| M 100 W                     | M4 | ø46 | ø8 | 4-M4 × L12  |
| Y 100 W                     | M4 | ø46 | ø8 | 4-M4 × L12  |
| P 100 W                     | M3 | ø45 | ø8 | 4-M3 × L12  |
| F 100 W                     | M4 | ø46 | ø8 | 4-M4 × L12  |

\*When the stroke is 50 mm, in some cases sensors must be attached on both sides.

| Stroke code        | 0050 | 0100 | 0150 | 0200 | 0250 | 0300 | 0350 | 0400 |
|--------------------|------|------|------|------|------|------|------|------|
| Stroke length (mm) | 50   | 100  | 150  | 200  | 250  | 300  | 350  | 400  |
| L                  | 300  | 350  | 400  | 450  | 500  | 550  | 600  | 650  |
| L1                 | 253  | 303  | 353  | 403  | 453  | 503  | 553  | 603  |
| A                  | 25   | 75   | 25   | 75   | 25   | 75   | 25   | 75   |
| M                  | 0    | 0    | 1    | 1    | 2    | 2    | 3    | 3    |
| N                  | 4    | 4    | 6    | 6    | 8    | 8    | 10   | 10   |
| P                  | 25   | 75   | 125  | 175  | 225  | 275  | 325  | 375  |
| Weight (kg)        | 1.9  | 2.1  | 2.3  | 2.5  | 2.7  | 2.9  | 3.1  | 3.2  |

## List of attachments

### [Motor mounting]

| Mounted motor specification | Timing belt, pulley  | Motor mounting bolt |                   |
|-----------------------------|----------------------|---------------------|-------------------|
|                             |                      | Size                | Included quantity |
| M                           | Included at shipment | M4                  | 4                 |
| Y                           |                      | M4                  | 4                 |
| P                           |                      | M3                  | 4                 |
| F                           |                      | M4                  | 4                 |

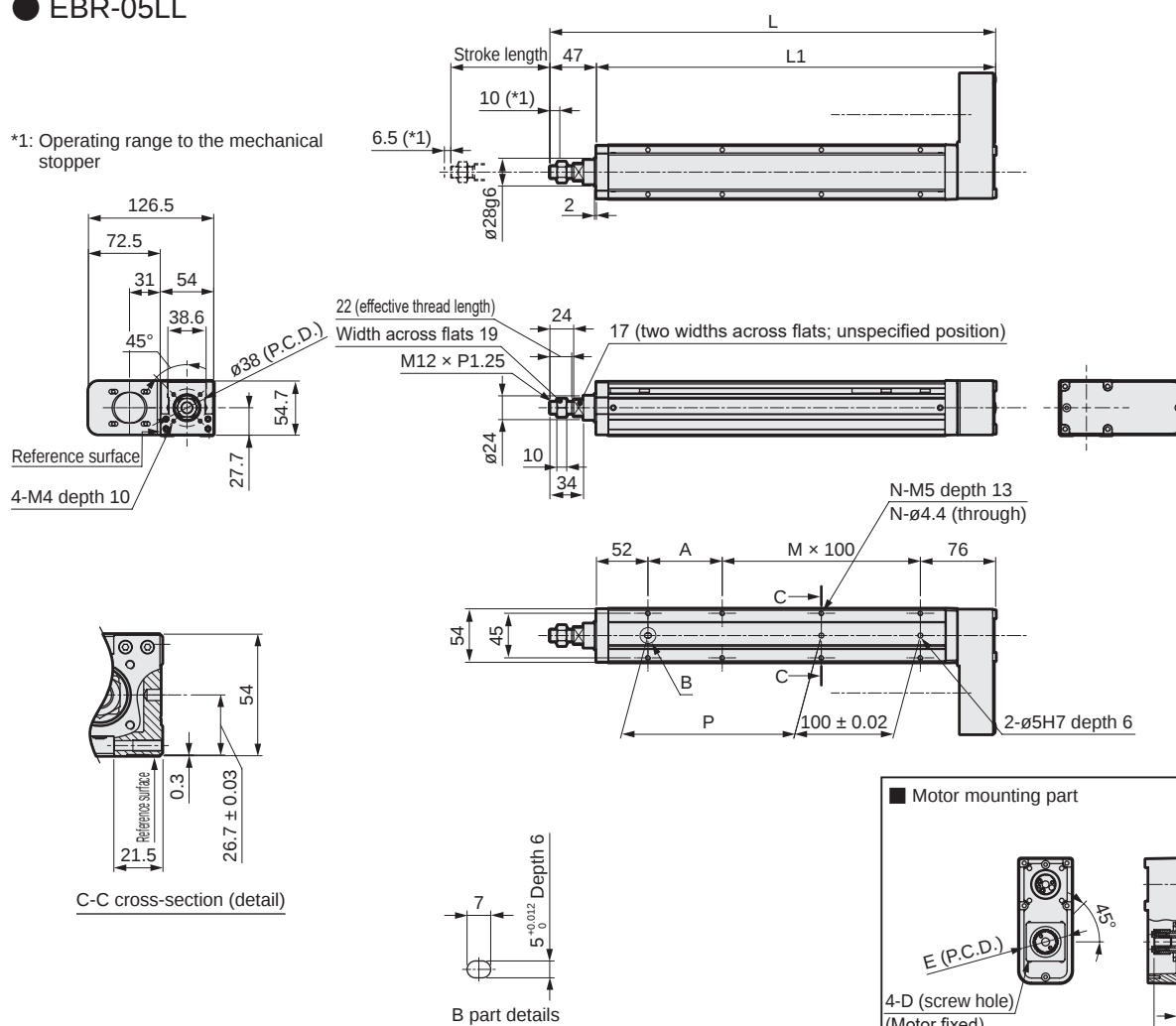
### [When origin/limit sensors are selected]

| Sensor       |           |                   |
|--------------|-----------|-------------------|
| Manufacturer | Model     | Included quantity |
| KITA         | KT-32N-2M | 3                 |

\*Refer to page 80 for sensor specifications.

### Dimensions Motor left-side mounting

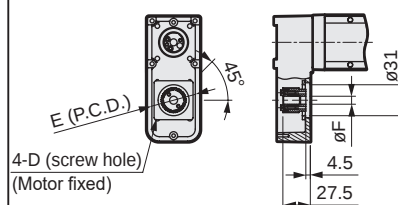
● EBR-05LL



\*When the stroke is 50 mm, in some cases sensors must be attached on both sides.

| Stroke code        | 0050 | 0100 | 0150 | 0200 | 0250 | 0300 | 0350 | 0400 |
|--------------------|------|------|------|------|------|------|------|------|
| Stroke length (mm) | 50   | 100  | 150  | 200  | 250  | 300  | 350  | 400  |
| L                  | 300  | 350  | 400  | 450  | 500  | 550  | 600  | 650  |
| L1                 | 253  | 303  | 353  | 403  | 453  | 503  | 553  | 603  |
| 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)        | 1.9  | 2.1  | 2.3  | 2.5  | 2.7  | 2.9  | 3.1  | 3.2  |

■ Motor mounting part



| Mounted motor specification | D  | E   | F  | Motor screw |
|-----------------------------|----|-----|----|-------------|
| M 100 W                     | M4 | ø46 | ø8 | 4-M4 × L12  |
| Y 100 W                     | M4 | ø46 | ø8 | 4-M4 × L12  |
| P 100 W                     | M3 | ø45 | ø8 | 4-M3 × L12  |
| F 100 W                     | M4 | ø46 | ø8 | 4-M4 × L12  |

## List of attachments

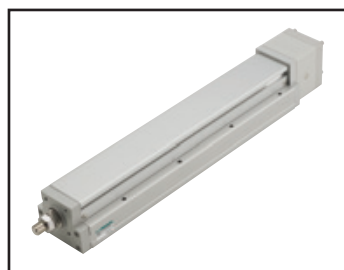
[Motor mounting]

| Mounted motor specification | Timing belt, pulley  | Motor mounting bolt |                   |
|-----------------------------|----------------------|---------------------|-------------------|
|                             |                      | Size                | Included quantity |
| M                           | Included at shipment | M4                  | 4                 |
| Y                           |                      | M4                  | 4                 |
| P                           |                      | M3                  | 4                 |
| F                           |                      | M4                  | 4                 |

[When origin/limit sensors are selected]

| Sensor       |           |                   |
|--------------|-----------|-------------------|
| Manufacturer | Model     | Included quantity |
| KITA         | KT-32N-2M | 3                 |

\*Refer to page 80 for sensor specifications.



Electric actuator (motorless) Rod with built-in guide

# EBR-08LE

Straight motor mounting

● Servo motor size: 200 W

RoHS

## How to order

EBR - 08 L E - 00 - 05 0050 N NN - M 2 N N

**A** Body size  
08 Body width 82 mm

**B** Motor  
L None

**C** Motor mounting direction  
E Straight mounting

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

**E** Stroke length  
0050 50 mm  
to (In 50 mm increments)  
0700 700 mm

**F** Brake  
N None

**G** Mounted motor specification  
M Select the mounted motor specification from the table at right.  
Y  
P  
F

**H** Motor size  
2 200 W

**I** Origin sensor \*1  
N None  
C Yes

**J** Limit sensor \*1  
N None  
B Yes

| Manufacturer                    | 200 W |
|---------------------------------|-------|
| Mitsubishi Electric Corporation | M     |
| Delta Electronics Co., Ltd.     | M     |
| Sanyo Denki Co., Ltd.           | M     |
| YASKAWA Electric Corporation    | Y     |
| Keyence Corporation             | Y     |
| Panasonic Corporation           | P     |
| OMRON Corporation               | P     |
| Fuji Electric Co., Ltd.         | M     |
| FANUC CORPORATION               | F     |
| Bosch Rexroth AG                | P     |
| Rockwell Automation, Inc.       | M     |
| SIEMENS AG                      | M     |

\*1 Origin sensor and limit sensor are available as a set. As it is both-or-nothing, select "None" for both.

\*Refer to page 49 for the motor model No.

## Specifications

|                                         |                                                             |     |      |
|-----------------------------------------|-------------------------------------------------------------|-----|------|
| Applicable motor sizes                  | 200 W servo motor                                           |     |      |
| Drive method                            | Ball screw $\phi 16$                                        |     |      |
| Stroke length mm                        | 50 to 700                                                   |     |      |
| Screw lead mm                           | 5                                                           | 10  | 20   |
| Max. load capacity kg                   |                                                             |     |      |
| Horizontal                              | 50                                                          | 30  | 12   |
| Vertical                                | 15                                                          | 8   | 2.5  |
| Max. speed mm/s                         | 250                                                         | 500 | 1000 |
| Rated thrust *1 N                       | 683                                                         | 341 | 174  |
| Repeatability mm                        | $\pm 0.01$                                                  |     |      |
| Lost motion mm                          | 0.1 or less                                                 |     |      |
| Operating ambient temperature, humidity | 0 to 40°C (no freezing)<br>35 to 80% RH (no condensation)   |     |      |
| Storage ambient temperature, humidity   | -10 to 50°C (no freezing)<br>35 to 80% RH (no condensation) |     |      |
| Atmosphere                              | No corrosive gas, explosive gas, or dust                    |     |      |

\*Refer to pages 76 to 77 for the allowable applied load for the overhang amount.

\*1 Rated thrust and max. load capacity are guideline values assuming that the motor mounted will output the rated torque.

## Stroke and max. speed

(mm/s)

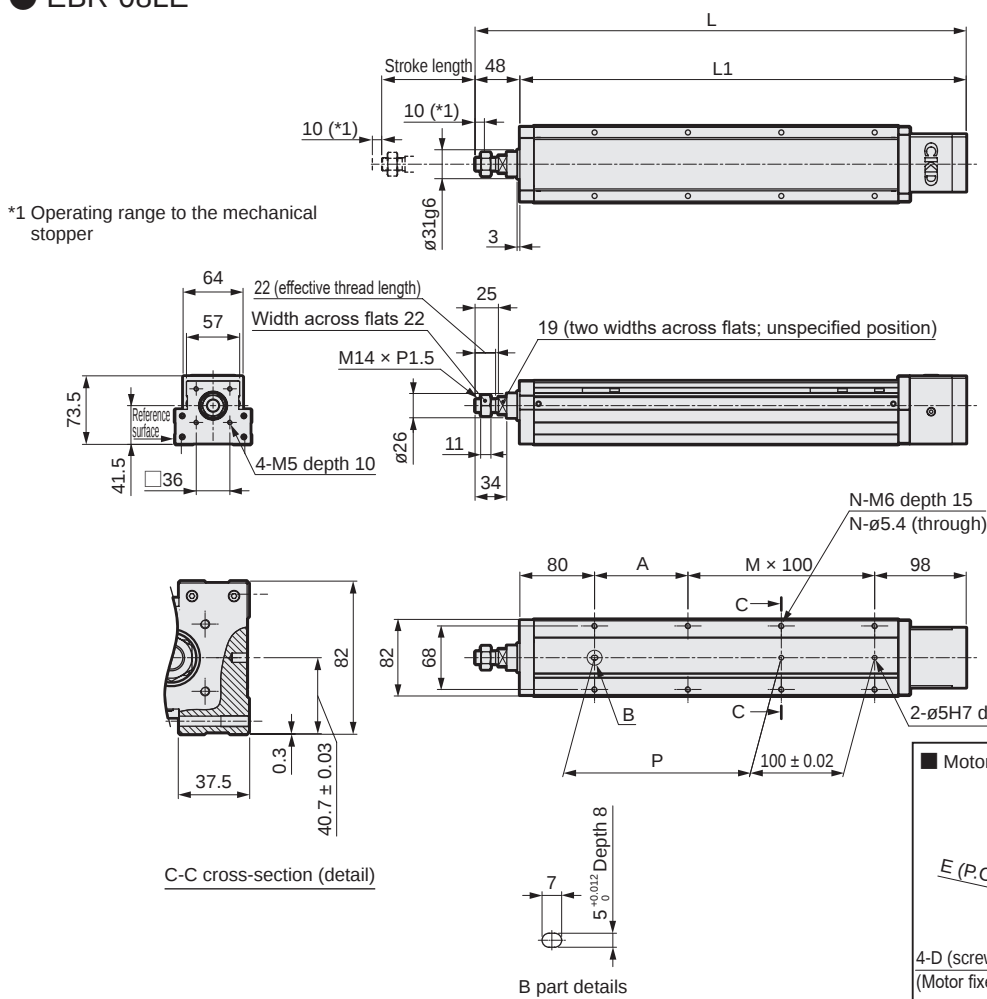
| Stroke length | 50 to 300 | 350 to 700 |
|---------------|-----------|------------|
| Screw lead    |           |            |
| 5             | 250       | 200        |
| 10            | 500       | 400        |
| 20            | 1000      | 850        |

\*Max. speed is when the motor mounted by the customer can output rotation speed of 3000 rpm.

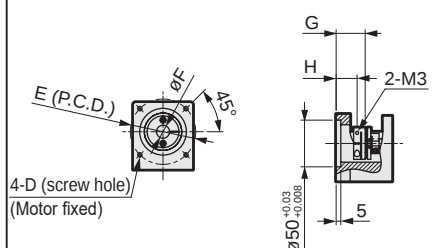
The max. speed is restricted by the stroke. Do not move at speeds beyond the limit.

### Dimensions Straight motor mounting

#### ● EBR-08LE



#### Motor mounting part



| Mounted motor specification | D  | E   | F   | G    | H    | Motor mounting bolt |
|-----------------------------|----|-----|-----|------|------|---------------------|
| M 200 W                     | M5 | ø70 | ø14 | 31.1 | 22.5 | 4-M5 × L18          |
| Y 200 W                     | M5 | ø70 | ø14 | 31.1 | 22.5 | 4-M5 × L18          |
| P 200 W                     | M4 | ø70 | ø11 | 31.1 | 22.5 | 4-M4 × L18          |
| F 200 W                     | M5 | ø70 | ø9  | 29.1 | 20.5 | 4-M5 × L16          |

\*When the stroke is 50 mm, in some cases sensors must be attached on both sides.

| 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                  | 376  | 426  | 476  | 526  | 576  | 626  | 676  | 726  | 776  | 826  | 876  | 926  | 976  | 1026 |
| L1                 | 328  | 378  | 428  | 478  | 528  | 578  | 628  | 678  | 728  | 778  | 828  | 878  | 928  | 978  |
| 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)        | 4.0  | 4.4  | 4.8  | 5.1  | 5.5  | 5.9  | 6.3  | 6.6  | 7.0  | 7.4  | 7.7  | 8.1  | 8.5  | 8.8  |

### List of attachments

#### [Motor mounting parts]

| Mounted motor specification | Coupling              | Motor mounting bolt |          |
|-----------------------------|-----------------------|---------------------|----------|
|                             |                       | Size                | Quantity |
| M                           | Assembled at shipment | M4                  | 4        |
| Y                           |                       | M4                  | 4        |
| P                           |                       | M3                  | 4        |
| F                           |                       | M4                  | 4        |

#### [Origin sensor, limit sensor]

| Manufacturer | Model     | Included quantity |
|--------------|-----------|-------------------|
| KITA         | KT-32N-2M | 3                 |

\*Refer to page 80 for sensor specifications.



Electric actuator (motorless) Rod with built-in guide

# EBR-08L\*

Motor side mounting (left, right, bottom)

● Servo motor size: 200 W

RoHS

## How to order

EBR - 08 L R - 00 - 05 0050 N NN - M 2 N N

**A** Body size  
08 Body width 82 mm

**B** Motor  
L None

**C** Motor mounting direction  
R Right mounting  
D Bottom mounting  
L Left mounting

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

**E** Stroke length  
0050 50 mm  
to (In 50 mm increments)  
0700 700 mm

**F** Brake  
N None

**G** Mounted motor specification  
M Select the mounted motor specification from the table at right.  
Y  
P  
F

**H** Motor size  
2 200 W

**I** Origin sensor \*1  
N None  
C Yes

**J** Limit sensor \*1  
N None  
B Yes

| Manufacturer                    | 200 W |
|---------------------------------|-------|
| Mitsubishi Electric Corporation | M     |
| Delta Electronics Co., Ltd.     | M     |
| Sanyo Denki Co., Ltd.           | M     |
| YASKAWA Electric Corporation    | Y     |
| Keyence Corporation             | Y     |
| Panasonic Corporation           | P     |
| OMRON Corporation               | P     |
| Fuji Electric Co., Ltd.         | M     |
| FANUC CORPORATION               | F     |
| Bosch Rexroth AG                | P     |
| Rockwell Automation, Inc.       | M     |
| SIEMENS AG                      | M     |

\*1 Origin sensor and limit sensor are available as a set. As it is both-or-nothing, select "None" for both.

\*Refer to page 49 for the motor model No.

## Specifications

| Applicable motor sizes                  | 200 W servo motor                                           |     |      |
|-----------------------------------------|-------------------------------------------------------------|-----|------|
| Drive method                            | Ball screw $\phi 16$                                        |     |      |
| Stroke length mm                        | 50 to 700                                                   |     |      |
| Screw lead                              | 5                                                           | 10  | 20   |
| Max. load capacity kg                   | Horizontal                                                  | 50  | 30   |
|                                         | Vertical                                                    | 15  | 8    |
| Max. speed mm/s                         | 250                                                         | 500 | 1000 |
| Rated thrust N                          | 683                                                         | 341 | 174  |
| Repeatability mm                        | $\pm 0.01$                                                  |     |      |
| Lost motion mm                          | 0.1 or less                                                 |     |      |
| Operating ambient temperature, humidity | 0 to 40°C (no freezing)<br>35 to 80% RH (no condensation)   |     |      |
| Storage ambient temperature, humidity   | -10 to 50°C (no freezing)<br>35 to 80% RH (no condensation) |     |      |
| Atmosphere                              | No corrosive gas, explosive gas, or dust                    |     |      |

\*Refer to pages 76 to 77 for the allowable applied load for the overhang amount.

\*1 Rated thrust and max. load capacity are guideline values assuming that the motor mounted will output the rated torque.

## Stroke and max. speed

|               |      | (mm/s)    |     |     |     |     |     |     |     |
|---------------|------|-----------|-----|-----|-----|-----|-----|-----|-----|
| Stroke length | Lead | 50 to 300 | 350 | 400 | 450 | 500 | 550 | 600 | 700 |
| 5             | 5    | 250       | 200 |     |     |     |     |     |     |
|               | 10   | 500       | 400 |     |     |     |     |     |     |
|               | 20   | 1000      | 850 |     |     |     |     |     |     |

\*Max. speed is when the motor mounted by the customer can output rotation speed of 3000 rpm.

The max. speed is restricted by the stroke. Do not move at speeds beyond the limit.

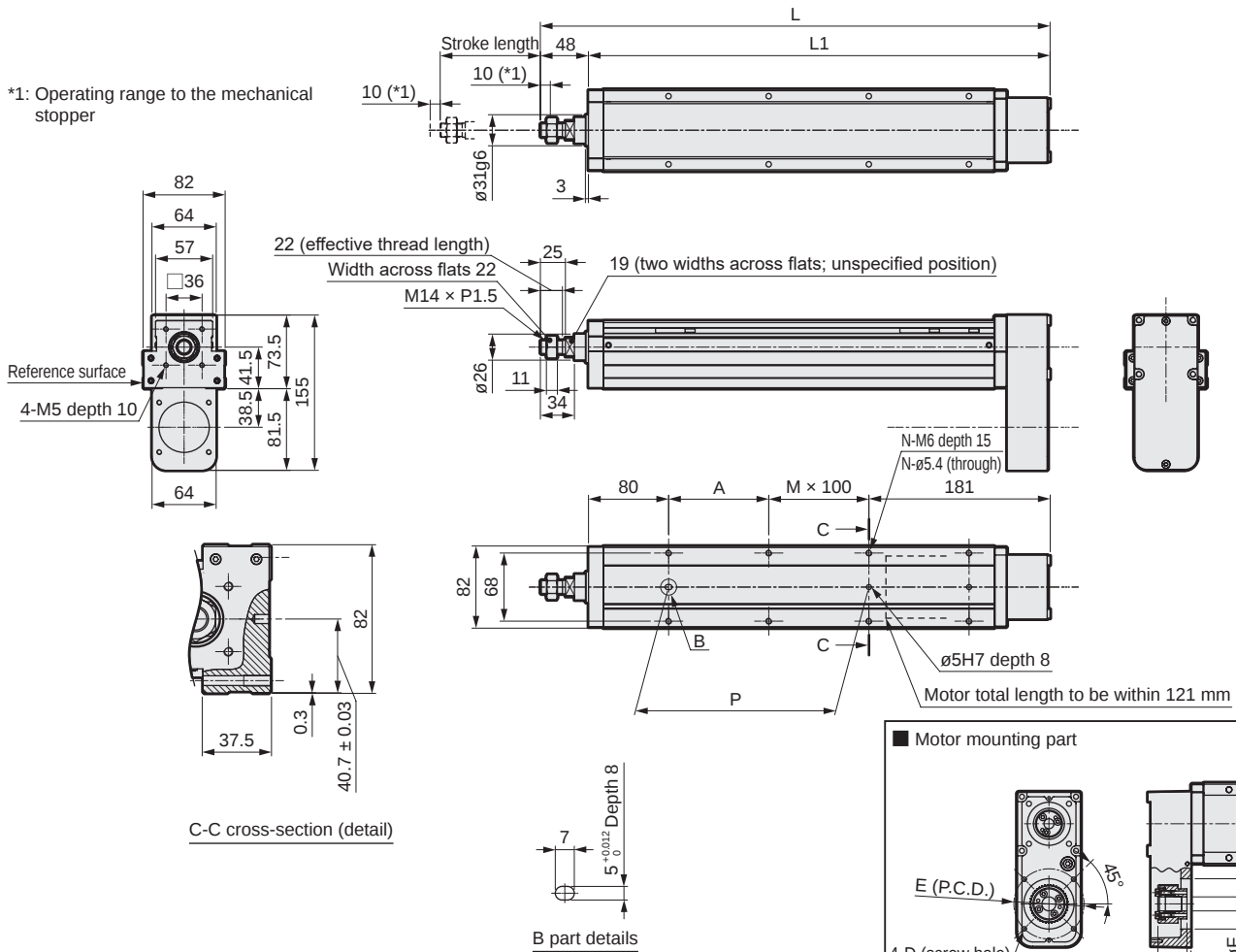


# EBR-08L\*

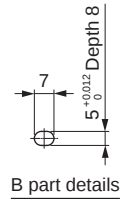
## Dimensions Motor bottom mounting

### ● EBR-08LD

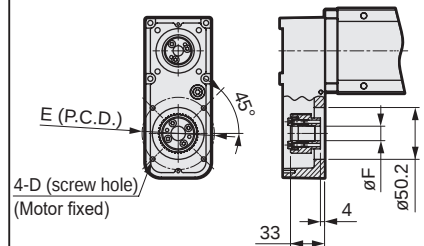
\*1: Operating range to the mechanical stopper



C-C cross-section (detail)



#### Motor mounting part



| Mounted motor specification | D  | E   | F   | Motor screw |
|-----------------------------|----|-----|-----|-------------|
| M 200 W                     | M5 | ø70 | ø14 | 4-M5 × L18  |
| Y 200 W                     | M5 | ø70 | ø14 | 4-M5 × L18  |
| P 200 W                     | M4 | ø70 | ø11 | 4-M4 × L18  |
| F 200 W                     | M5 | ø70 | ø9  | 4-M5 × L16  |

\*When the stroke is 50 mm, in some cases sensors must be attached on both sides.

| 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                  | 359  | 409  | 459  | 509  | 559  | 609  | 659  | 709  | 759  | 809  | 859  | 909  | 959  | 1009 |
| L1                 | 311  | 361  | 411  | 461  | 511  | 561  | 611  | 661  | 711  | 761  | 811  | 861  | 911  | 961  |
| A                  | 50   | 100  | 50   | 100  | 50   | 100  | 50   | 100  | 50   | 100  | 50   | 100  | 50   | 100  |
| M                  | 0    | 0    | 1    | 1    | 2    | 2    | 3    | 3    | 4    | 4    | 5    | 5    | 6    | 6    |
| N                  | 4    | 4    | 6    | 6    | 8    | 8    | 10   | 10   | 12   | 12   | 14   | 14   | 16   | 16   |
| P                  | 50   | 100  | 150  | 200  | 250  | 300  | 350  | 400  | 450  | 500  | 550  | 600  | 650  | 700  |
| Weight (kg)        | 4.4  | 4.8  | 5.1  | 5.5  | 5.9  | 6.2  | 6.6  | 7.0  | 7.3  | 7.7  | 8.1  | 8.4  | 8.8  | 9.1  |

## List of attachments

### [Motor mounting]

| Mounted motor specification | Timing belt, pulley  | Motor mounting bolt |                   |
|-----------------------------|----------------------|---------------------|-------------------|
|                             |                      | Size                | Included quantity |
| M                           | Included at shipment | M4                  | 4                 |
| Y                           |                      | M4                  | 4                 |
| P                           |                      | M3                  | 4                 |
| F                           |                      | M4                  | 4                 |

### [When origin/limit sensors are selected]

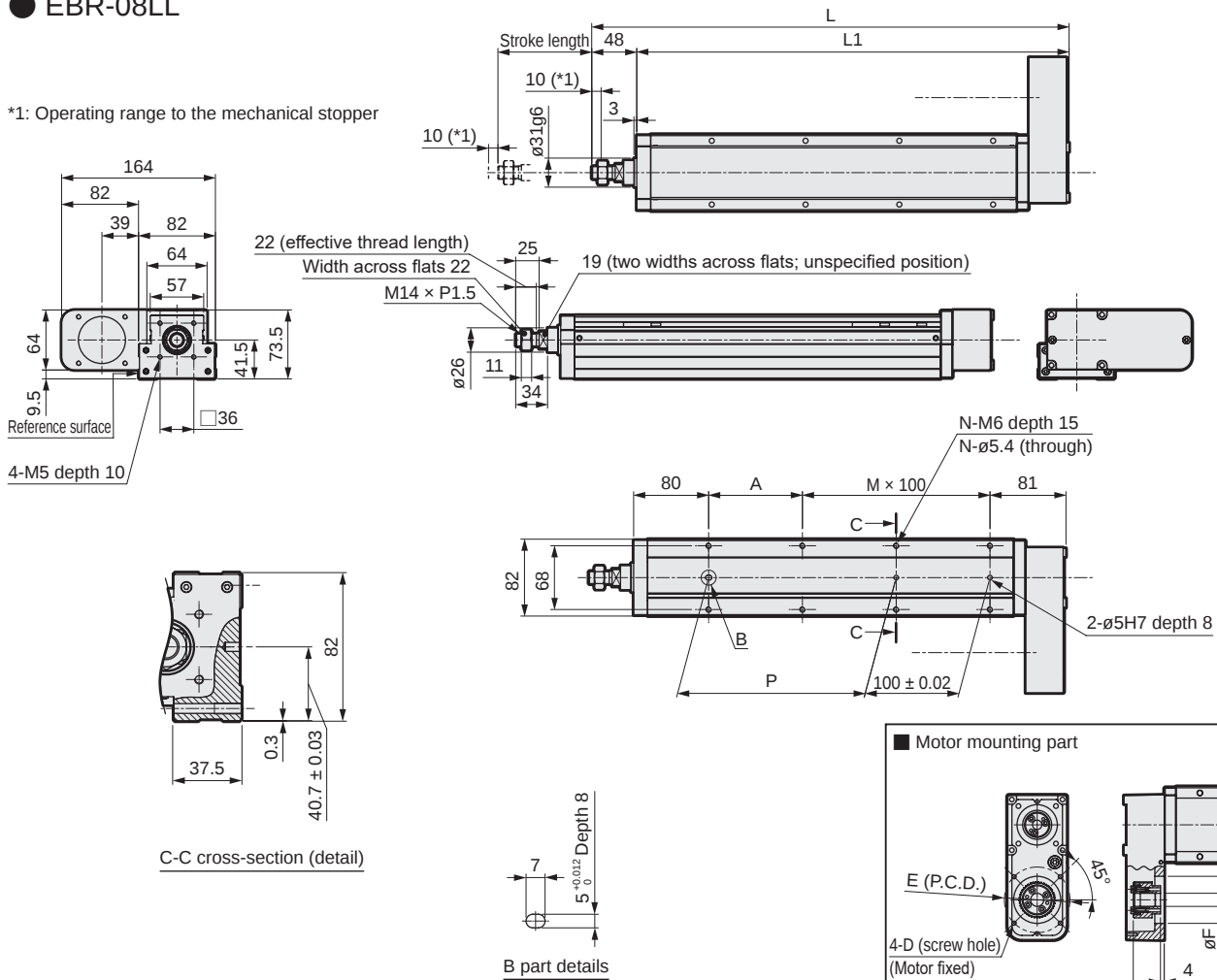
| Sensor       |           |                   |
|--------------|-----------|-------------------|
| Manufacturer | Model     | Included quantity |
| KITA         | KT-32N-2M | 3                 |

\*Refer to page 80 for sensor specifications.

### Dimensions Motor left-side mounting

#### EBR-08LL

\*1: Operating range to the mechanical stopper



\*When the stroke is 50 mm, in some cases sensors must be attached on both sides.

| 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                  | 359  | 409  | 459  | 509  | 559  | 609  | 659  | 709  | 759  | 809  | 859  | 909  | 959  | 1009 |
| L1                 | 311  | 361  | 411  | 461  | 511  | 561  | 611  | 661  | 711  | 761  | 811  | 861  | 911  | 961  |
| 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)        | 4.4  | 4.8  | 5.1  | 5.5  | 5.9  | 6.2  | 6.6  | 7.0  | 7.3  | 7.7  | 8.1  | 8.4  | 8.8  | 9.1  |

### List of attachments

#### [Motor mounting]

| Mounted motor specification | Timing belt, pulley  | Motor mounting bolt |                   |
|-----------------------------|----------------------|---------------------|-------------------|
|                             |                      | Size                | Included quantity |
| M                           | Included at shipment | M4                  | 4                 |
| Y                           |                      | M4                  | 4                 |
| P                           |                      | M3                  | 4                 |
| F                           |                      | M4                  | 4                 |

#### [When origin/limit sensors are selected]

| Sensor       |           |                   |
|--------------|-----------|-------------------|
| Manufacturer | Model     | Included quantity |
| KITA         | KT-32N-2M | 3                 |

\*Refer to page 80 for sensor specifications.



Electric actuator (motorless) Rod with built-in guide

# EBR-12LE

Straight motor mounting

● Servo motor size: 400 W

RoHS

## How to order

EBR - 12 L E - 00 - 05 0050 N NN - M 4 N N

**A Body size**  
12 Body width 120 mm

**B Motor**  
L None

**C Motor mounting direction**  
E Straight mounting

**D Screw lead**

|    |       |
|----|-------|
| 05 | 5 mm  |
| 10 | 10 mm |
| 20 | 20 mm |
| 32 | 32 mm |

**E Stroke length**

|      |                       |
|------|-----------------------|
| 0050 | 50 mm                 |
| to   | (In 50 mm increments) |
| 0800 | 800 mm                |

**F Brake**  
N None

**G Mounted motor specification**

|   |                                        |
|---|----------------------------------------|
| M | Select the mounted motor               |
| Y | specification from the table at right. |
| P |                                        |

**H Motor size**  
4 400 W

**I Origin sensor \*1**

|   |      |
|---|------|
| N | None |
| C | Yes  |

**J Limit sensor \*1**

|   |      |
|---|------|
| N | None |
| B | Yes  |

| Manufacturer                    | 400 W |
|---------------------------------|-------|
| Mitsubishi Electric Corporation | M     |
| Delta Electronics Co., Ltd.     | M     |
| Sanyo Denki Co., Ltd.           | M     |
| YASKAWA Electric Corporation    | Y     |
| Keyence Corporation             | Y     |
| Panasonic Corporation           | P     |
| OMRON Corporation               | P     |
| Fuji Electric Co., Ltd.         | M     |
| Bosch Rexroth AG                | P     |
| Rockwell Automation, Inc.       | M     |
| SIEMENS AG                      | M     |

\*1 Origin sensor and limit sensor are available as a set. As it is both-or-nothing, select "None" for both.

\*Refer to page 49 for the motor model No.

## Specifications

| Applicable motor sizes                  |            | 400 W servo motor                                           |     |      |      |
|-----------------------------------------|------------|-------------------------------------------------------------|-----|------|------|
| Drive method                            |            | Ball screw $\varnothing 16$                                 |     |      |      |
| Stroke length mm                        |            | 50 to 800                                                   |     |      |      |
| Screw lead mm                           |            | 5                                                           | 10  | 20   | 32   |
| Max. load capacity kg<br>*1             | Horizontal | 110                                                         | 88  | 40   | 30   |
|                                         | Vertical   | 33                                                          | 22  | 10   | 8    |
| Max. speed mm/s                         |            | 250                                                         | 500 | 1000 | 1600 |
| Rated thrust *1 N                       |            | 1388                                                        | 694 | 347  | 218  |
| Repeatability mm                        |            | $\pm 0.01$                                                  |     |      |      |
| Lost motion mm                          |            | 0.1 or less                                                 |     |      |      |
| Operating ambient temperature, humidity |            | 0 to 40°C (no freezing)<br>35 to 80% RH (no condensation)   |     |      |      |
| Storage ambient temperature, humidity   |            | -10 to 50°C (no freezing)<br>35 to 80% RH (no condensation) |     |      |      |
| Atmosphere                              |            | No corrosive gas, explosive gas, or dust                    |     |      |      |

\*Refer to pages 76 to 77 for the allowable applied load for the overhang amount.

\*1 Rated thrust and max. load capacity are guideline values assuming that the motor mounted will output the rated torque.

## Stroke and max. speed

(mm/s)

| Stroke length<br>Screw lead | 50 to 300 | 350 to 800 |
|-----------------------------|-----------|------------|
| 5                           | 250       | 200        |
| 10                          | 500       | 400        |
| 20                          | 1000      | 850        |
| 32                          | 1600      | 1350       |

\*Max. speed is when the motor mounted by the customer can output rotation speed of 3000 rpm.  
The max. speed is restricted by the stroke. Do not move at speeds beyond the limit.





Electric actuator (motorless) Rod with built-in guide

# EBR-12L\*

Motor side mounting (left, right, bottom)

● Servo motor size: 400 W

RoHS

## How to order

EBR - 12 L R - 00 - 05 0050 N NN - M 4 N N

**A** Body size  
12 Body width 120 mm

**B** Motor  
L None

**C** Motor mounting direction  
R Right mounting  
D Bottom mounting  
L Left mounting

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

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

**F** Brake  
N None

**G** Mounted motor specification  
M Select the mounted motor  
Y specification from the table at  
P right.

**H** Motor size  
4 400 W

**I** Origin sensor \*1  
N None  
C Yes

**J** Limit sensor \*1  
N None  
B Yes

| Manufacturer                    | 400 W |
|---------------------------------|-------|
| Mitsubishi Electric Corporation | M     |
| Delta Electronics Co., Ltd.     | M     |
| Sanyo Denki Co., Ltd.           | M     |
| YASKAWA Electric Corporation    | Y     |
| Keyence Corporation             | Y     |
| Panasonic Corporation           | P     |
| OMRON Corporation               | P     |
| Fuji Electric Co., Ltd.         | M     |
| Bosch Rexroth AG                | P     |
| Rockwell Automation, Inc.       | M     |
| SIEMENS AG                      | M     |

\*1 Origin sensor and limit sensor are available as a set. As it is both-or-nothing, select "None" for both.

\*Refer to page 49 for the motor model No.

## Specifications

|                                         |                                                             |     |      |      |
|-----------------------------------------|-------------------------------------------------------------|-----|------|------|
| Applicable motor sizes                  | 400 W servo motor                                           |     |      |      |
| Drive method                            | Ball screw $\varnothing 16$                                 |     |      |      |
| Stroke length mm                        | 50 to 800                                                   |     |      |      |
| Screw lead mm                           | 5                                                           | 10  | 20   | 32   |
| Max. load capacity kg                   |                                                             |     |      |      |
| Horizontal                              | 110                                                         | 88  | 40   | 30   |
| Vertical                                | 33                                                          | 22  | 10   | 8    |
| Max. speed mm/s                         | 250                                                         | 500 | 1000 | 1600 |
| Rated thrust *1 N                       | 1388                                                        | 694 | 347  | 218  |
| Repeatability mm                        | $\pm 0.01$                                                  |     |      |      |
| Lost motion mm                          | 0.1 or less                                                 |     |      |      |
| Operating ambient temperature, humidity | 0 to 40°C (no freezing)<br>35 to 80% RH (no condensation)   |     |      |      |
| Storage ambient temperature, humidity   | -10 to 50°C (no freezing)<br>35 to 80% RH (no condensation) |     |      |      |
| Atmosphere                              | No corrosive gas, explosive gas, or dust                    |     |      |      |

\*Refer to pages 76 to 77 for the allowable applied load for the overhang amount.

\*1 Rated thrust and max. load capacity are guideline values assuming that the motor mounted will output the rated torque.

## Stroke and max. speed

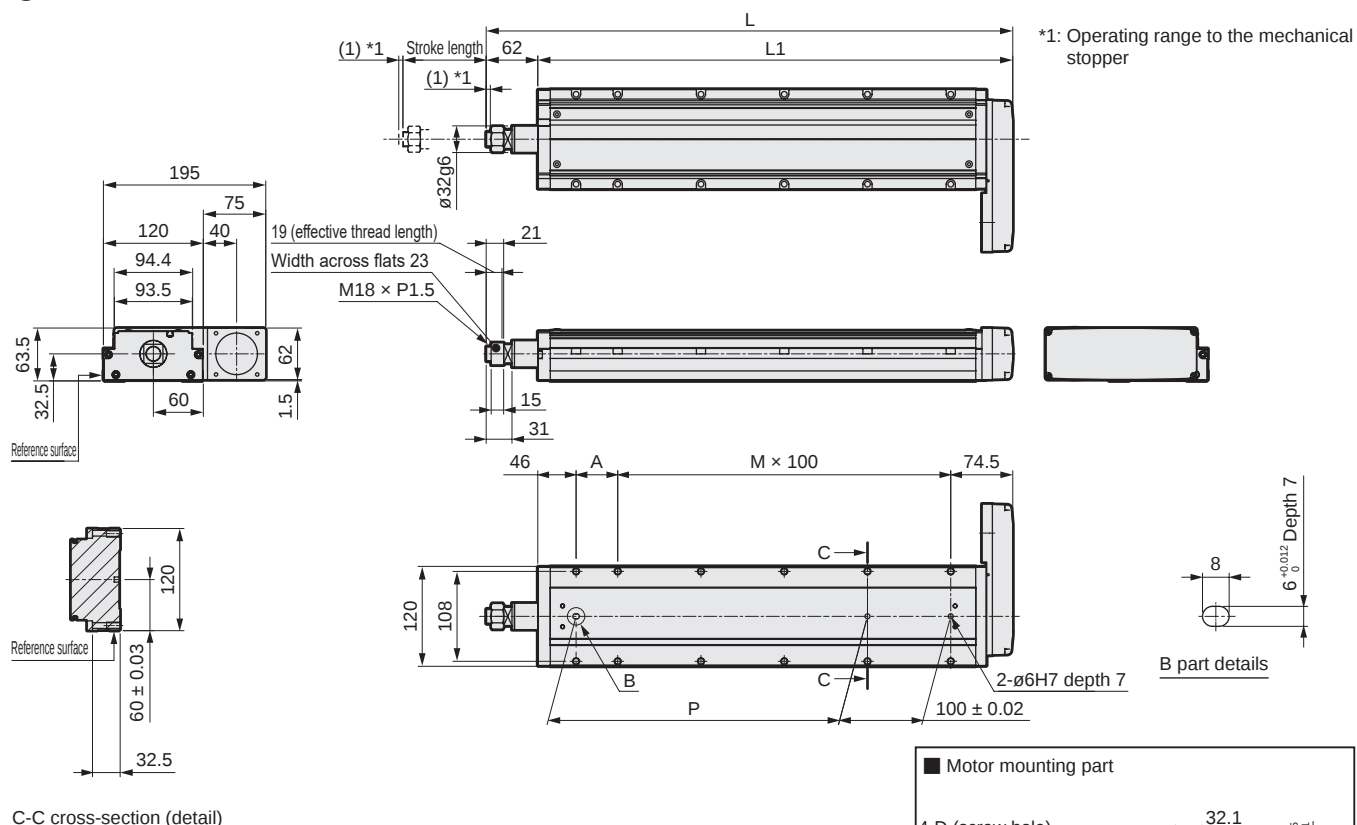
|               |           |            |
|---------------|-----------|------------|
| (mm/s)        |           |            |
| Stroke length | 50 to 300 | 350 to 700 |
| Screw lead    |           |            |
| 5             | 250       | 200        |
| 10            | 500       | 400        |
| 20            | 1000      | 850        |
| 32            | 1600      | 1350       |

\*Max. speed is when the motor mounted by the customer can output rotation speed of 3000 rpm.

The max. speed is restricted by the stroke. Do not move at speeds beyond the limit.

### Dimensions Motor right-side mounting

● EBR-12LR



\*When the stroke is 50 mm, in some cases sensors must be attached on both sides.

| 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                  | 382.5 | 432.5 | 482.5 | 532.5 | 582.5 | 632.5 | 682.5 | 732.5 | 782.5 | 832.5 | 882.5 | 932.5 | 982.5 | 1032.5 | 1082.5 | 1132.5 |
| L1                 | 320.5 | 370.5 | 420.5 | 470.5 | 520.5 | 570.5 | 620.5 | 670.5 | 720.5 | 770.5 | 820.5 | 870.5 | 920.5 | 970.5  | 1020.5 | 1070.5 |
| A                  | 100   | 50    | 100   | 50    | 100   | 50    | 100   | 50    | 100   | 50    | 100   | 50    | 100   | 50     | 100    | 50     |
| M                  | 1     | 2     | 2     | 3     | 3     | 4     | 4     | 5     | 5     | 6     | 6     | 7     | 7     | 8      | 8      | 9      |
| N                  | 6     | 8     | 8     | 10    | 10    | 12    | 12    | 14    | 14    | 16    | 16    | 18    | 18    | 20     | 20     | 22     |
| P                  | 100   | 150   | 200   | 250   | 300   | 350   | 400   | 450   | 500   | 550   | 600   | 650   | 700   | 750    | 800    | 850    |
| Weight (kg)        | 5.4   | 5.8   | 6.3   | 6.8   | 7.3   | 7.8   | 8.3   | 8.8   | 9.2   | 9.7   | 10.2  | 10.7  | 11.2  | 11.7   | 12.2   | 12.6   |

## List of attachments

[Motor mounting]

| Mounted motor specification | Timing belt, pulley  | Motor mounting bolt |                   |
|-----------------------------|----------------------|---------------------|-------------------|
|                             |                      | Size                | Included quantity |
| M                           | Included at shipment | M5                  | 4                 |
| Y                           |                      | M5                  | 4                 |
| P                           |                      | M4                  | 4                 |

[When origin/limit sensors are selected]

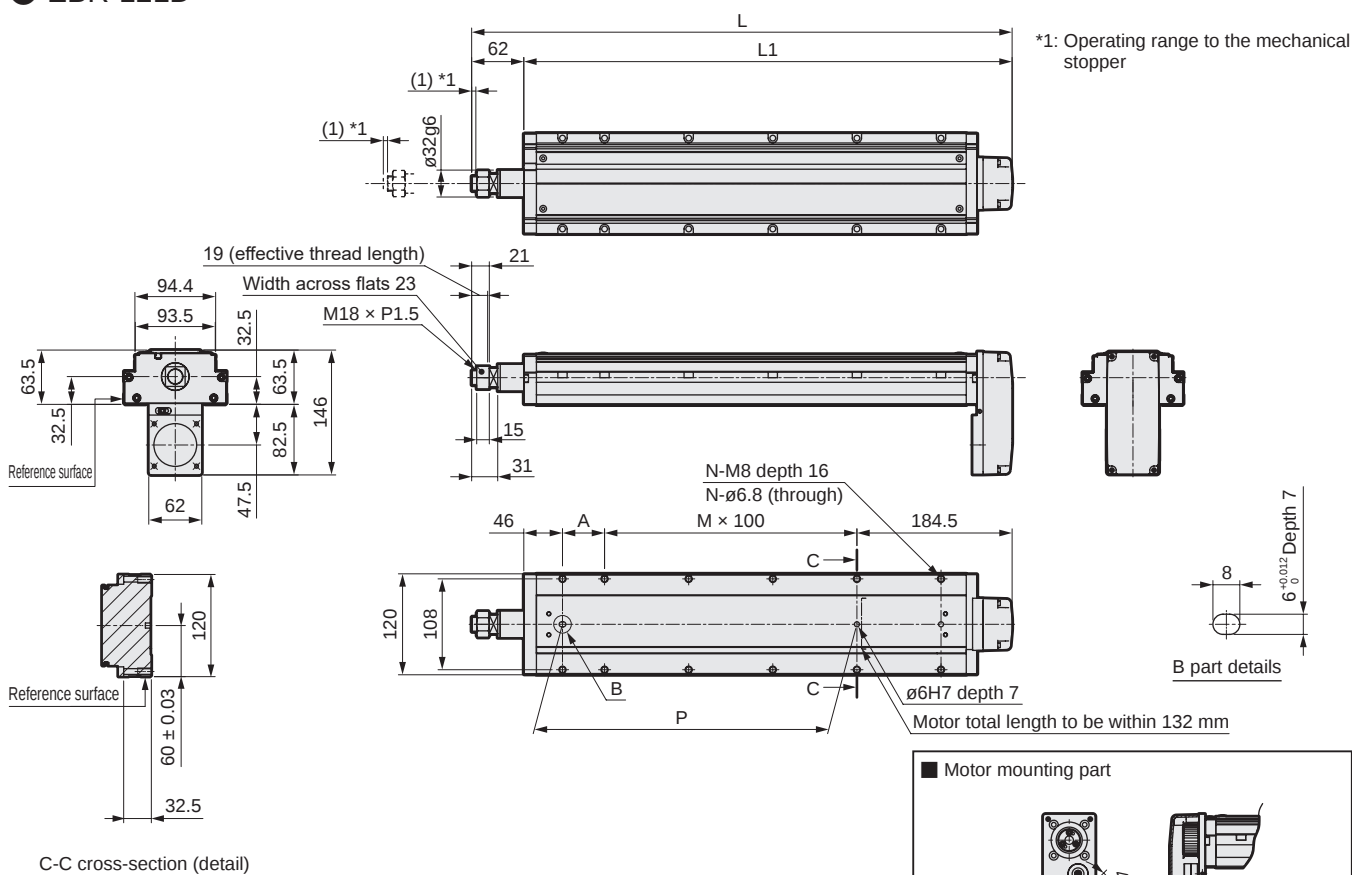
| Sensor       |           |                   |
|--------------|-----------|-------------------|
| Manufacturer | Model     | Included quantity |
| KITA         | KT-32N-2M | 3                 |

\*Refer to page 80 for sensor specifications.

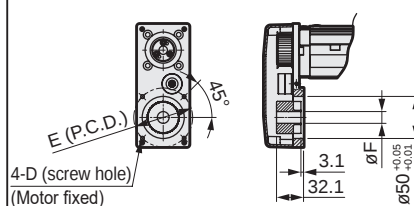
# EBR-12L\*

## Dimensions Motor bottom mounting

● EBR-12LD



■ Motor mounting part



| Mounted motor specification | D  | E   | F   | Motor screw |
|-----------------------------|----|-----|-----|-------------|
| M 400 W                     | M5 | Ø70 | Ø14 | 4-M5 × L18  |
| Y 400 W                     | M5 | Ø70 | Ø14 | 4-M5 × L18  |
| P 400 W                     | M4 | Ø70 | Ø14 | 4-M4 × L18  |

\*When the stroke is 50 mm, in some cases sensors must be attached on both sides.

| 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                  | 392.5 | 442.5 | 492.5 | 542.5 | 592.5 | 642.5 | 692.5 | 742.5 | 792.5 | 842.5 | 892.5 | 942.5 | 992.5 | 1042.5 | 1092.5 | 1142.5 |
| L1                 | 330.5 | 380.5 | 430.5 | 480.5 | 530.5 | 580.5 | 630.5 | 680.5 | 730.5 | 780.5 | 830.5 | 880.5 | 930.5 | 980.5  | 1030.5 | 1080.5 |
| A                  | 100   | 50    | 100   | 50    | 100   | 50    | 100   | 50    | 100   | 50    | 100   | 50    | 100   | 50     | 100    | 50     |
| M                  | 0     | 1     | 1     | 2     | 2     | 3     | 3     | 4     | 4     | 5     | 5     | 6     | 6     | 7      | 7      | 8      |
| N                  | 4     | 6     | 6     | 8     | 8     | 10    | 10    | 12    | 12    | 14    | 14    | 16    | 16    | 18     | 18     | 20     |
| P                  | 100   | 150   | 200   | 250   | 300   | 350   | 400   | 450   | 500   | 550   | 600   | 650   | 700   | 750    | 800    | 850    |
| Weight (kg)        | 5.3   | 5.8   | 6.3   | 6.8   | 7.3   | 7.7   | 8.2   | 8.7   | 9.2   | 9.7   | 10.2  | 10.7  | 11.1  | 11.6   | 12.1   | 12.6   |

## List of attachments

[Motor mounting]

| Mounted motor specification | Timing belt, pulley  | Motor mounting bolt |                   |
|-----------------------------|----------------------|---------------------|-------------------|
|                             |                      | Size                | Included quantity |
| M                           | Included at shipment | M5                  | 4                 |
| Y                           |                      | M5                  | 4                 |
| P                           |                      | M4                  | 4                 |

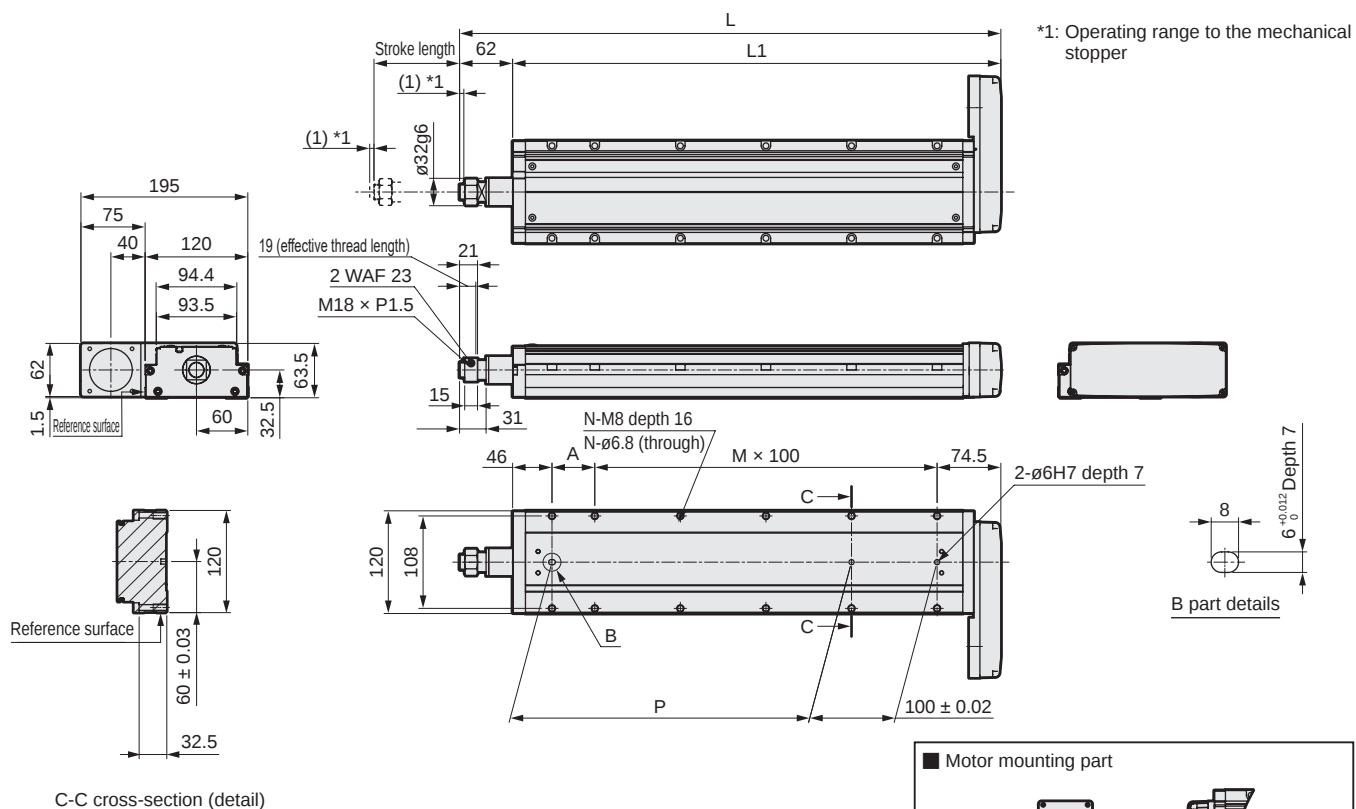
[When origin/limit sensors are selected]

| Sensor       |           |                   |
|--------------|-----------|-------------------|
| Manufacturer | Model     | Included quantity |
| KITA         | KT-32N-2M | 3                 |

\*Refer to page 80 for sensor specifications.

### Dimensions Motor left-side mounting

● EBR-12LL



\*When the stroke is 50 mm, in some cases sensors must be attached on both sides.

| 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                  | 382.5 | 432.5 | 482.5 | 532.5 | 582.5 | 632.5 | 682.5 | 732.5 | 782.5 | 832.5 | 882.5 | 932.5 | 982.5 | 1032.5 | 1082.5 | 1132.5 |
| L1                 | 320.5 | 370.5 | 420.5 | 470.5 | 520.5 | 570.5 | 620.5 | 670.5 | 720.5 | 770.5 | 820.5 | 870.5 | 920.5 | 970.5  | 1020.5 | 1070.5 |
| A                  | 100   | 50    | 100   | 50    | 100   | 50    | 100   | 50    | 100   | 50    | 100   | 50    | 100   | 50     | 100    | 50     |
| M                  | 1     | 2     | 2     | 3     | 3     | 4     | 4     | 5     | 5     | 6     | 6     | 7     | 7     | 8      | 8      | 9      |
| N                  | 6     | 8     | 8     | 10    | 10    | 12    | 12    | 14    | 14    | 16    | 16    | 18    | 18    | 20     | 20     | 22     |
| P                  | 100   | 150   | 200   | 250   | 300   | 350   | 400   | 450   | 500   | 550   | 600   | 650   | 700   | 750    | 800    | 850    |
| Weight (kg)        | 5.4   | 5.8   | 6.3   | 6.8   | 7.3   | 7.8   | 8.3   | 8.8   | 9.2   | 9.7   | 10.2  | 10.7  | 11.2  | 11.7   | 12.2   | 12.6   |

## List of attachments

[Motor mounting]

| Mounted motor specification | Timing belt, pulley  | Motor mounting bolt |                   |
|-----------------------------|----------------------|---------------------|-------------------|
|                             |                      | Size                | Included quantity |
| M                           | Included at shipment | M5                  | 4                 |
| Y                           |                      | M5                  | 4                 |
| P                           |                      | M4                  | 4                 |

[When origin/limit sensors are selected]

| Sensor       |           |                   |
|--------------|-----------|-------------------|
| Manufacturer | Model     | Included quantity |
| KITA         | KT-32N-2M | 3                 |

\*Refer to page 80 for sensor specifications.

## Model selection

### STEP 1 Confirming load capacity

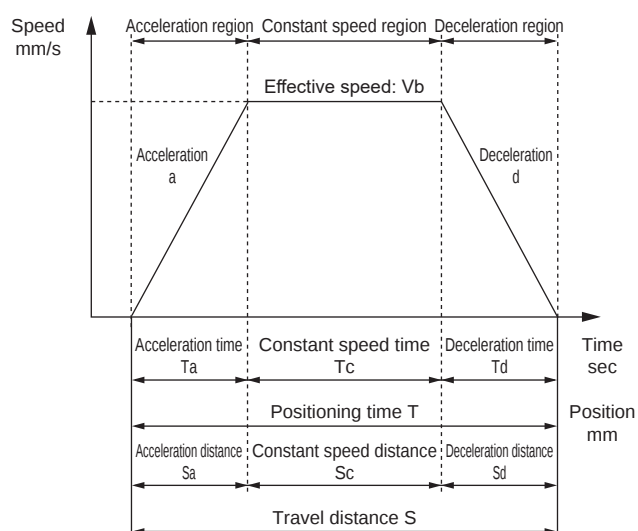
Load capacity varies with mounting orientation and screw lead.

Refer to the Series Variation (page 46) and the specification table for each model to select the size and screw lead.

### STEP 2 Confirming positioning time

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

Select the speed and acceleration/deceleration from the specification table for each model and the motor selected by the customer.



|                  | Description             | Code | Unit              | Remarks                                              |
|------------------|-------------------------|------|-------------------|------------------------------------------------------|
| Set value        | Set speed               | V    | mm/s              |                                                      |
|                  | Set acceleration        | a    | mm/s <sup>2</sup> |                                                      |
|                  | Set deceleration        | d    | mm/s <sup>2</sup> |                                                      |
|                  | 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 acceleration/deceleration and stroke length, the trapezoid speed waveform may not be formed (the set speed may not be achieved). In this case, select the effective speed (Vb) from the set speed (V) and the achieved speed (Vmax), whichever is smaller.

\*Use at acceleration and deceleration of 1 G or less for horizontal use and 0.5 G or less for vertical use.

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

\*1 G  $\approx$  9.8 m/s<sup>2</sup>.

### STEP 3 Confirming allowable load weight

Confirm that the load weight during operation is within the allowable range (pages 76 to 77).

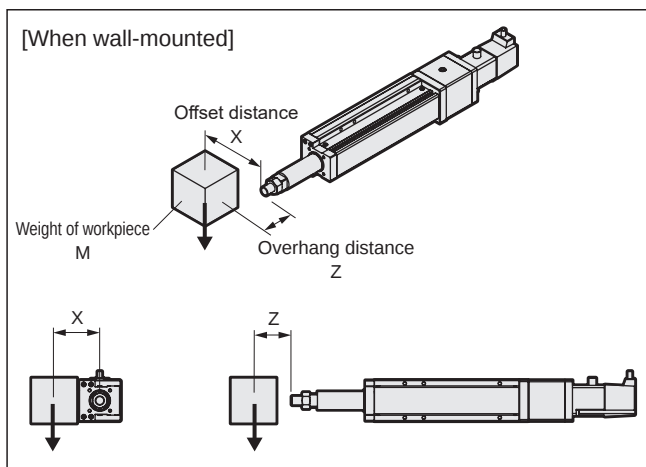
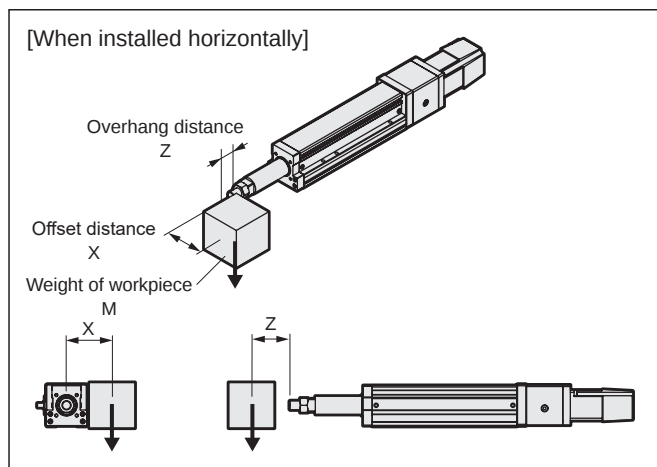
If the allowable load weight is exceeded, increase the size or use an external guide in conjunction.

MEMO

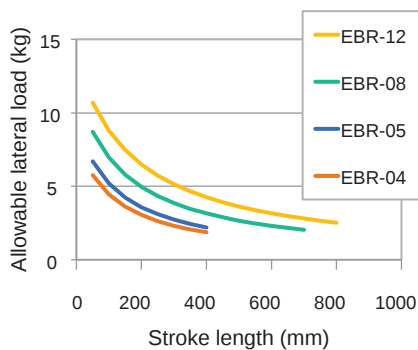
| Servo motor compatible |     |     |                |     |     |     | Stepper motor compatible |     |     |     | Safety precautions |
|------------------------|-----|-----|----------------|-----|-----|-----|--------------------------|-----|-----|-----|--------------------|
| EBS                    | EBR | ETS | ETS Multi-Axis | ECS | ETV | ECV | EKS                      | EBS | EBR | ETS | ECS                |

## Allowable load weight

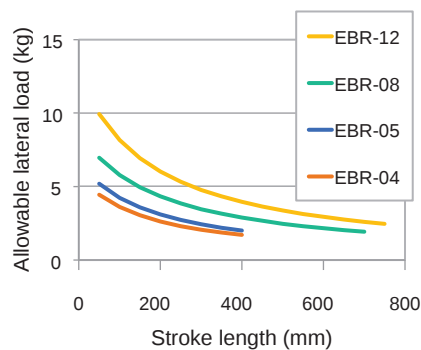
[When installed horizontally or wall-mounted]



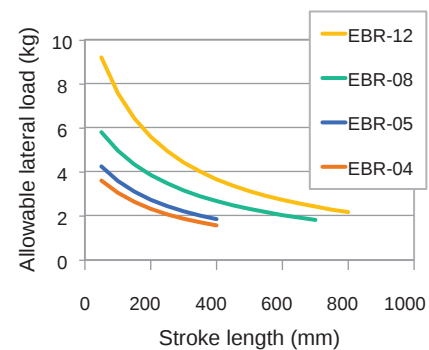
[Offset (X) 0 / Overhang distance (Z) 0 mm]



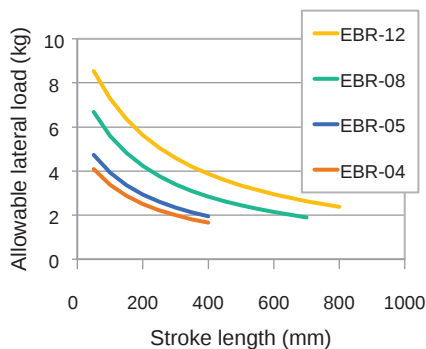
[Offset (X) 0 / Overhang distance (Z) 50 mm]



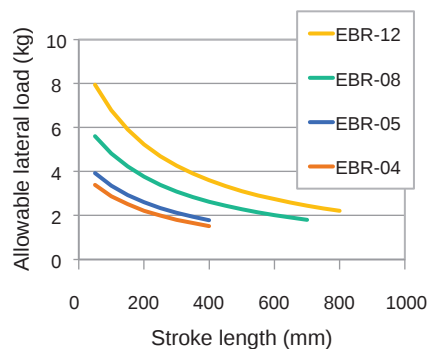
[Offset (X) 0 / Overhang distance (Z) 100 mm]



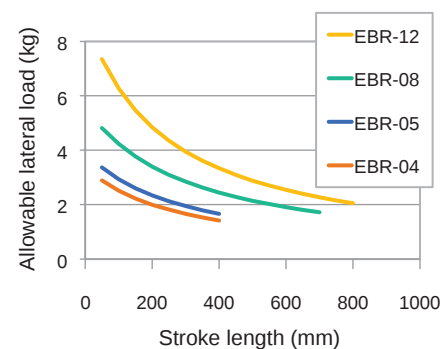
[Offset (X) 100 mm / Overhang distance (Z) 0 mm]



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



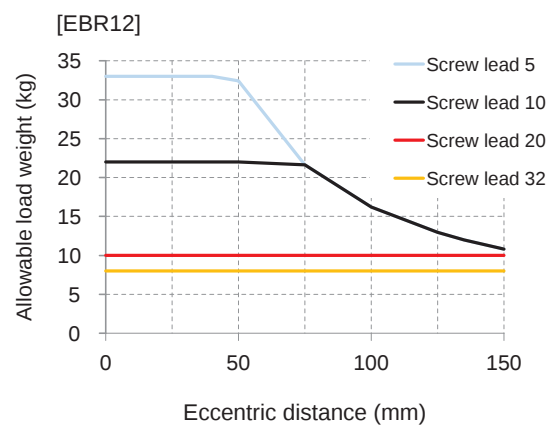
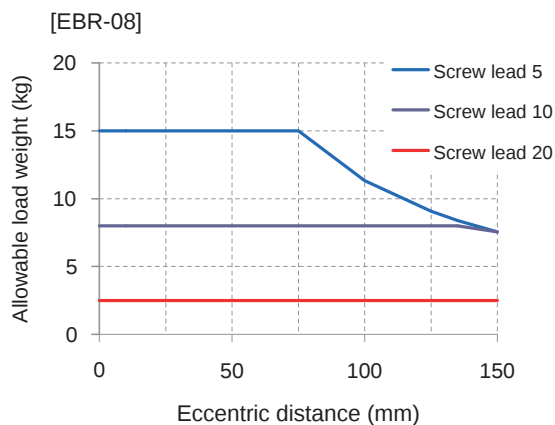
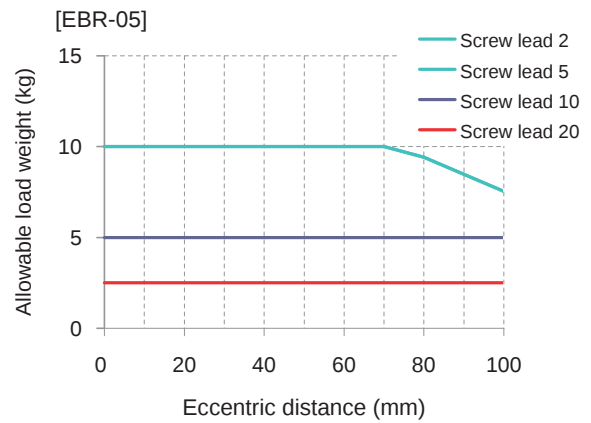
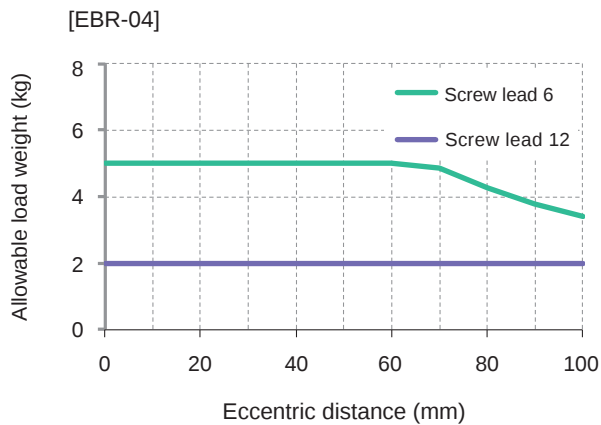
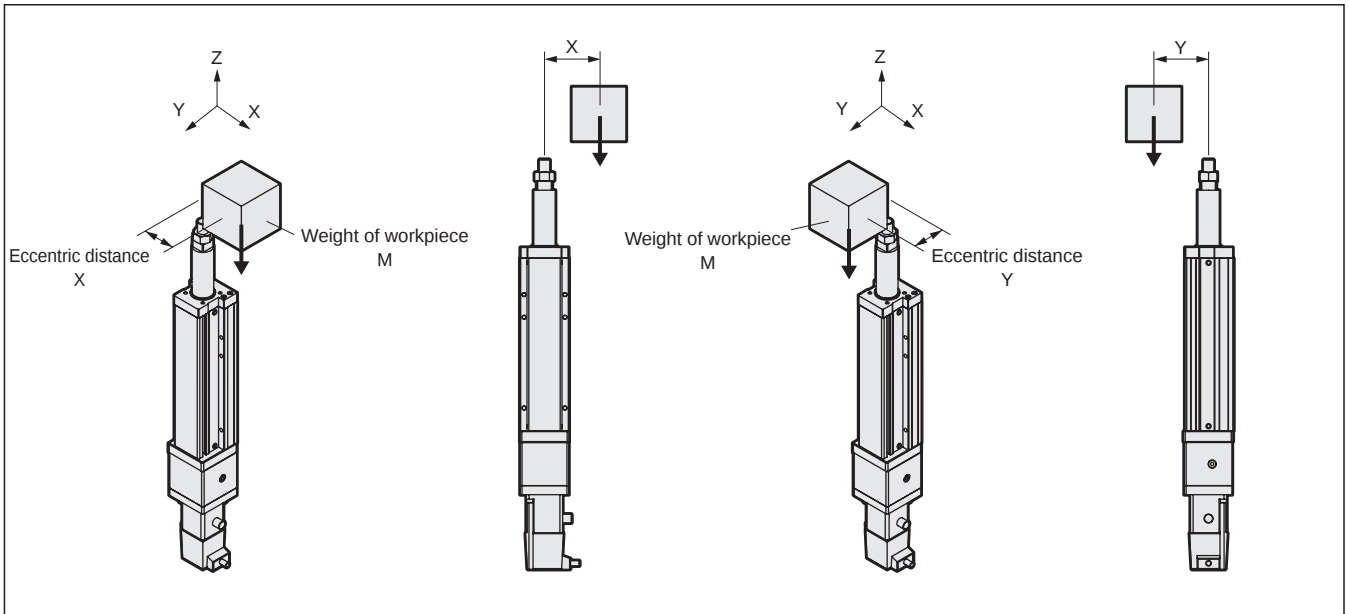
[Offset (X) 100 mm / Overhang distance (Z) 100 mm]



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

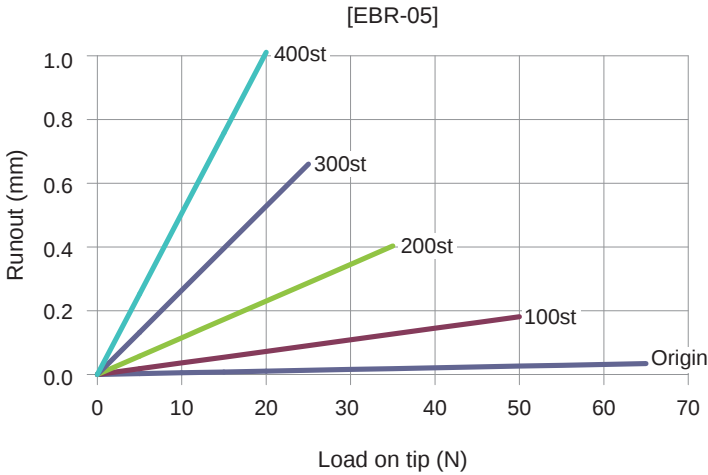
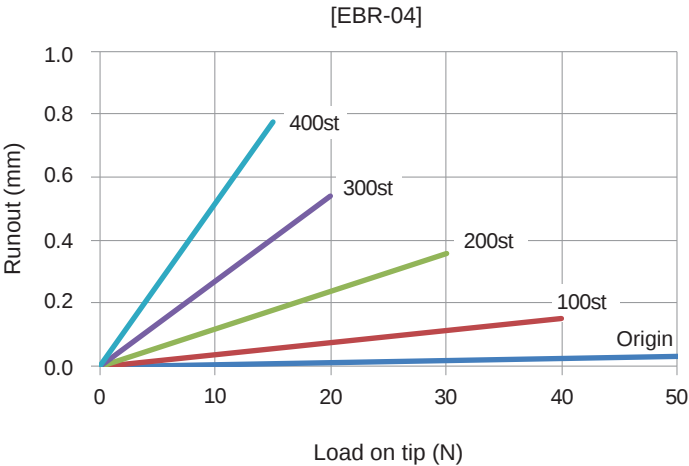
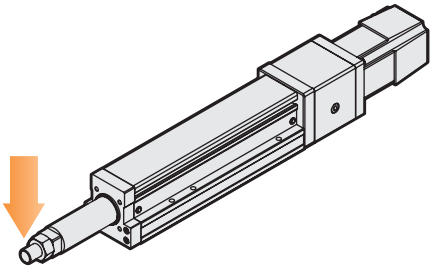
## Allowable load weight

[When installed vertically]



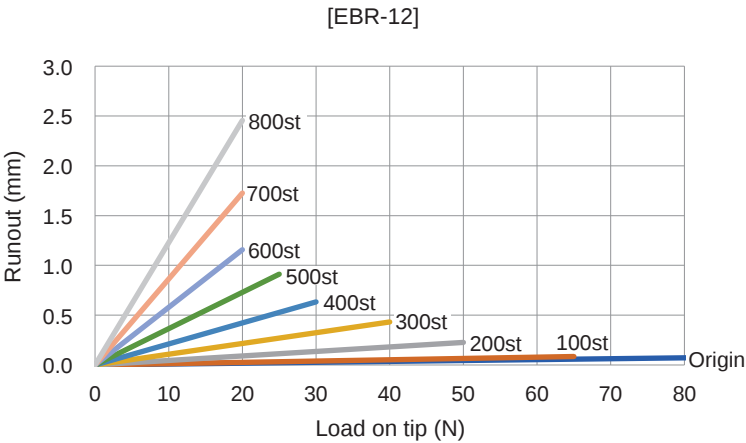
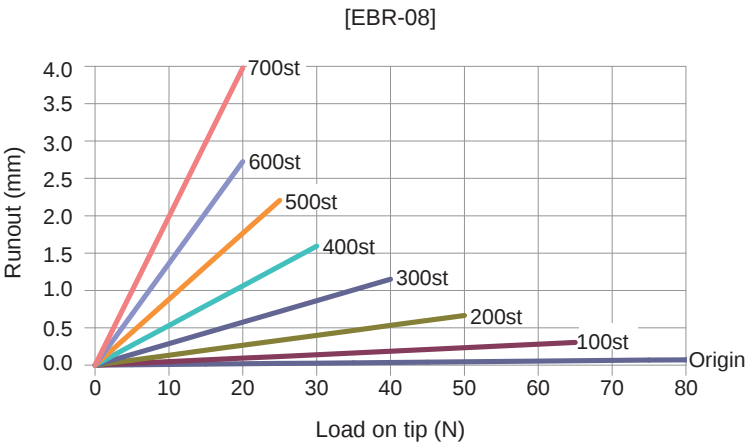
\* Values are when the actuator operating life is 5,000km. (Acceleration/deceleration 0.5G, speed 300mm/s)  
Screw lead: 2 mm is the value when the travel life is 1,000km.

Rod end runout (EBR Series) \*Reference value



Rod end runout (EBR Series) \*Reference value

|                        |     |     |                |     |     |     |     |     |     |                          |  |  |  |                    |
|------------------------|-----|-----|----------------|-----|-----|-----|-----|-----|-----|--------------------------|--|--|--|--------------------|
| Servo motor compatible |     |     |                |     |     |     |     |     |     | Stepper motor compatible |  |  |  | Safety precautions |
| EBS                    | EBR | ETS | ETS Multi-Axis | ECS | ETV | ECV | EKS | EBS | EBR |                          |  |  |  |                    |

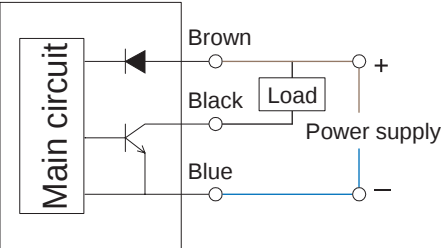


Origin sensor, limit sensor

[Specifications]

| Item                  |              | Specifications           |
|-----------------------|--------------|--------------------------|
| Manufacturer          | Manufacturer | KITA                     |
|                       | Model        | KT-32N-2M                |
| Output method         |              | NPN output               |
| Load voltage          |              | 10 to 30 VDC             |
| Load current          |              | 100 mA or less           |
| Current consumption   |              | 17 mA at 24 DC           |
| Internal voltage drop |              | Max. 1.5 V               |
| Leakage current       |              | Max. 0.01 mA             |
| Indicator lamp        |              | Red                      |
| Impact resistance     |              | 50 G                     |
| Ambient temperature   |              | -10 to 70°C              |
| Degree of protection  |              | IP67 IEC 60529 Standards |
| Cord length           |              | 2 m                      |

Output circuit



## List of attachments

### Motor mounting bolt (common motor mounting direction)

| Model No. | Mounted motor specification | Motor size | Size | Quantity |
|-----------|-----------------------------|------------|------|----------|
| EBR-04    | M                           | 50 W       | M4   | 4        |
|           | Y                           |            | M4   | 4        |
|           | P                           |            | M3   | 4        |
|           | F                           |            | M4   | 4        |
| EBR-05    | M                           | 100 W      | M4   | 4        |
|           | Y                           |            | M4   | 4        |
|           | P                           |            | M3   | 4        |
|           | F                           |            | M4   | 4        |
| EBR-08    | M                           | 200 W      | M5   | 4        |
|           | Y                           |            | M5   | 4        |
|           | P                           |            | M4   | 4        |
|           | F                           |            | M5   | 4        |
| EBR-12    | M                           | 400 W      | M5   | 4        |
|           | Y                           |            | M5   | 4        |
|           | P                           |            | M4   | 4        |

### Coupling

| Model No.                               | Attachment name                     | Quantity |
|-----------------------------------------|-------------------------------------|----------|
| LE (Motor mounting direction: Straight) | Coupling<br>(Assembled at shipment) | 1        |

### Timing belt, pulley (motor side)

| Model No.                          | Shipping format         | Quantity |
|------------------------------------|-------------------------|----------|
| L* (Motor mounting on side/bottom) | Included at shipment *1 | 1 each   |

\*1 The body side pulley is assembled.

### Origin sensor, limit sensor

| Model No.                      | Shipping format      | Quantity |
|--------------------------------|----------------------|----------|
| When "with" sensor is selected | Included at shipment | 3 *1     |

\*1 When "None" is selected for origin sensor or limit sensor, the other sensor is also "None".

## Maintenance parts

### ■ Maintenance parts (coupling)

| Model No.                                                                         | Compatibility                                  | Hole diameter |
|-----------------------------------------------------------------------------------|------------------------------------------------|---------------|
|  |                                                |               |
| EBS-05-COUPPLING                                                                  | EBR-04LE, EBR-05LE                             | ø8            |
| EBS-08-COUPPLING-M                                                                | EBR-08LE (Motor mounting specification: M/Y/F) | ø14           |
| EBS-08-COUPPLING-P                                                                | EBR-08LE (Motor mounting specification: P)     | ø11           |
| EBS-12-COUPPLING-M                                                                | EBR-12LE (Motor mounting specification: M, Y)  | ø14           |
| EBS-12-COUPPLING-P                                                                | EBR-12LE (Motor mounting specification: P)     | ø14           |

### ■ Maintenance parts (timing belt, pulley)

| Model No.                                                                          | Compatibility                                       | Part                                         |
|------------------------------------------------------------------------------------|-----------------------------------------------------|----------------------------------------------|
|  |                                                     |                                              |
| EBR-04-BELT-KIT                                                                    | EBR-04LR/LD/LL                                      | Timing belt, pulley (motor side)<br>(1 each) |
| EBS-05-BELT-KIT                                                                    | EBR-05LR/LD/LL                                      |                                              |
| EBS-08-BELT-KIT-M                                                                  | EBR-08LR/LD/LL (Mounted motor specification: M/Y/F) |                                              |
| EBS-08-BELT-KIT-P                                                                  | EBR-08LR/LD/LL (Mounted motor specification: P)     |                                              |
| EBS-12-BELT-KIT-M                                                                  | EBR-12LR/LD/LL (Mounted motor specification: M/Y)   |                                              |
| EBS-12-BELT-KIT-P                                                                  | EBR-12LR/LD/LL (Mounted motor specification: P)     |                                              |

### ■ Maintenance parts (origin sensor, limit sensor)

| Model No.                                                                           | Compatibility  | Part |
|-------------------------------------------------------------------------------------|----------------|------|
|  |                |      |
| EBR-SENSOR-N                                                                        | All EBR models | Body |

### ■ Maintenance parts (grease nozzle)

| Model No.                                                                           | Compatibility          |
|-------------------------------------------------------------------------------------|------------------------|
|  |                        |
| EBS-NOZZLE                                                                          | EBR-04, EBR-05, EBR-08 |