## Electric Actuator High Rigidity and High Precision Slider Type

# Circular arc grooves allow for high rigidity and high precision. 

Moment resistance ${ }^{* 1 * 2}$

$$
\begin{aligned}
& \text { Improved by } \\
& \text { up to }
\end{aligned}
$$

Table displacement ${ }^{* 1}$ Reduced by $500 / 0$
up to


With internal battery-less absolute encoder

- Restart from the last stop position is possible after recovery of the power supply.
-Reduced maintenance (No need for control or replacement)
*1 Compared with the LEFS
*2 Size 40, Mep, Overhang: 300 mm
Positioning repeatability: $\pm 0.01 \mathrm{~mm}^{* 3}$
*3 Excludes the lead H



## With a 4-row circular arc on each side for high rigidity and high precision (zero clearance)

## - Improved moment resistance



Improved Dynamic Allowable Moment

| Size | Moment <br> direction | Work load [kg] <br> (Overhang: 300 mm$)$ |  |
| :---: | :---: | :---: | :---: |
|  |  | High rigidity guide LEKFS | LEFS |
| $\mathbf{2 5}$ | Pitching <br> (Mep) | $\mathbf{7 . 5}(\mathbf{1 0 \%}$ increase) | 6.8 |
| $\mathbf{3 2}$ |  | $\mathbf{1 8}(\mathbf{3 5 \%}$ increase) | 13.3 |
| $\mathbf{4 0}$ |  | $\mathbf{3 7}(\mathbf{6 1 \%}$ increase) | 23 |



Table displacement amount reduced to $1 / 2$


## Table Displacement

| Size | Table displacement [mm] |  | Load <br> position <br> $[\mathrm{mm}]$ | Load <br> $[\mathrm{N}]$ |
| :---: | :---: | :---: | :---: | :---: |
|  | High rigidity guide LEKFS | LEFS | $\mathbf{2 5}$ | 200 |
| $\mathbf{2 5}$ | $\mathbf{0 . 0 2 2}$ (50\% reduction) | 0.044 | 25 |  |
| $\mathbf{3 2}$ | $\mathbf{0 . 0 3 6}$ (50\% reduction) | 0.072 | 30 | 450 |
| $\mathbf{4 0}$ | $\mathbf{0 . 0 2 7}$ (50\% reduction) | 0.053 | 37 | 500 |

## Zero table clearance



Table Clearance

| Size | Displacement due to table clearance [mm] |  |
| :---: | :---: | :---: |
|  | High rigidity guide LEKFS | LEFS |
| $\mathbf{2 5}$ | $\mathbf{0}$ | 0.079 |
| $\mathbf{3 2}$ | $\mathbf{0}$ | 0.068 |
| $\mathbf{4 0}$ | $\mathbf{0}$ | 0.052 |

## Auto switches are mountable.

Allows for position detection of the table throughout the stroke


Same dimensions as the LEF/Complete mounting compatibility is ensured.



The body bottom positioning pin holes have been standardized.


## Compatible Controllers

Battery-less Absolute Type (Step Motor 24 VDC)

## Step Motor Controller JXC Series



## Application Examples



## Selection Procedure

## Step 3 Check the allowable moment.

## Selection Example

Operating conditions


Step 1
Check the work load-speed. <Speed-Work load graph> (pages 5, 6)
Select a model based on the workpiece mass and speed while referencing the speed-work load graph.
Selection example) The LEKFS25EB-200 can be temporarily selected as a possible candidate based on the graph shown on the right side. the conditions such as motor types, load and in position of the step data. Therefore, calculate the settling time while referencing the following value.

T4 = 0.2 [s]

Calculation example)
T1 to T4 can be calculated as follows.
following calculation method.
Cycle time:
T can be found from the following equation.

$$
\mathrm{T}=\mathrm{T} 1+\mathrm{T} 2+\mathrm{T} 3+\mathrm{T} 4[\mathrm{~s}]
$$

-T1: Acceleration time and T3: Deceleration time can be found by the following equation.

$$
\mathrm{T} 1=\mathrm{V} / \mathrm{a} 1[\mathrm{~s}] \quad \mathrm{T} 3=\mathrm{V} / \mathrm{a} 2[\mathrm{~s}]
$$

- T2: Constant speed time can be found from the following equation.

$$
\mathrm{T} 2=\frac{\mathrm{L}-0.5 \cdot \mathrm{~V} \cdot(\mathrm{~T} 1+\mathrm{T} 3)}{\mathrm{V}}[\mathrm{~s}]
$$

-T4: Settling time varies depending on

## Step 2 Check the cycle time.

Calculate the cycle time using the

$$
\begin{aligned}
\mathrm{T} 1 & =\mathrm{V} / \mathrm{a} 1=300 / 3000=0.1[\mathrm{~s}], \\
\mathrm{T} 3 & =\mathrm{V} / \mathrm{a} 2=300 / 3000=0.1[\mathrm{~s}] \\
\mathrm{T} 2 & =\frac{\mathrm{L}-0.5 \cdot \mathrm{~V} \cdot(\mathrm{~T} 1+\mathrm{T} 3)}{\mathrm{V}} \\
& =\frac{200-0.5 \cdot 300 \cdot(0.1+0.1)}{300} \\
& =0.57[\mathrm{~s}] \\
\mathrm{T} 4 & =0.2[\mathrm{~s}]
\end{aligned}
$$

The cycle time can be found as follows.

$$
\begin{aligned}
\mathrm{T} & =\mathrm{T} 1+\mathrm{T} 2+\mathrm{T} 3+\mathrm{T} 4 \\
& =0.1+0.57+0.1+0.2 \\
& =0.97[\mathrm{~s}]
\end{aligned}
$$


<Speed-Work load graph> (LEKFS25/Step motor)


L : Stroke [mm] ... (Operating condition)
V : Speed [mm/s] ... (Operating condition)
a1: Acceleration [mm/s²] ... (Operating condition)
a2: Deceleration $\left[\mathrm{mm} / \mathrm{s}^{2}\right] \cdots$ (Operating condition)
T1: Acceleration time [s]
Time until reaching the set speed
T2: Constant speed time [s]
Time while the actuator is operating
at a constant speed
T3: Deceleration time [s]
Time from the beginning of the constant
speed operation to stop
T4: Settling time [s]
Time until positioning is completed

Step 3 Check the allowable moment. <Static allowable moment> (page 6) <Dynamic allowable moment> (page 7) Confirm the moment that applies to the actuator is within the allowable range for both static and dynamic conditions.


Based on the above calculation result, the LEKFS25EB-200 should be selected.


* If the step motor and servo motors do not meet your specifications, also consider the AC servo specification.


## LEKFS Series

Battery-less Absolute (Step Motor 24 VDC)

## Speed-Work Load Graph (Guide)

For Battery-less Absolute (Step Motor 24 VDC), In-line Motor Type

The following graphs show the values when the moving force is $100 \%$.

## LEKFS25/Ball Screw Drive



## LEKFS32/Ball Screw Drive



## Vertical



## LEKFS40/Ball Screw Drive




Speed-Work Load Graph (Guide)
For Battery-less Absolute (Step Motor 24 VDC), Motor Parallel Type

* The following graphs show the values when the moving force is $100 \%$.


## LEKFS25(L/R)/Ball Screw Drive



## LEKFS32(L/R)/Ball Screw Drive



LEKFS40(L/R)/Ball Screw Drive

## Horizontal



Vertical


## Static Allowable Moment* ${ }^{* 1}$

| Model | LEKFS25 | LEKFS32 | LEKFS40 |
| :---: | :---: | :---: | :---: |
| Pitching [N•m] | 61 | 141 | 264 |
| Yawing [N•m] | 70 | 141 | 264 |
| Rolling [N•m] | 115 | 290 | 473 |

*1 The static allowable moment is the amount of static moment which can be applied to the actuator when it is stopped.
If the product is exposed to impact or repeated load, be sure to take adequate safety
measures when using the product.

## Dynamic Allowable Moment

* These graphs show the amount of allowable overhang (guide unit) when the center of gravity of the workpiece overhangs in one direction. When selecting the overhang, refer to the "Calculation of Guide Load Factor" or the Electric Actuator Model Selection Software for confirmation: https://www.smcworld.com

* These graphs show the amount of allowable overhang (guide unit) when the center of gravity of the workpiece overhangs in one direction. When selecting the overhang, refer to the "Calculation of Guide


## Dynamic Allowable Moment

 Load Factor" or the Electric Actuator Model Selection Software for confirmation: https://www.smcworld.com

## Calculation of Guide Load Factor

1. Decide operating conditions.

Model: LEKFS
Size: 25/32/40
Mounting orientation: Horizontal/Bottom/Wall/Vertical

## Acceleration [mm/s²]: a

Work load [kg]: m
Work load center position [mm]: Xc/Yc/Zc
2. Select the target graph while referencing the model, size, and mounting orientation.
3. Based on the acceleration and work load, find the overhang [mm]: Lx/Ly/Lz from the graph.
4. Calculate the load factor for each direction.

$$
\alpha x=X c / L x, \alpha y=Y c / L y, \alpha z=Z c / L z
$$

5. Confirm the total of $\alpha \mathbf{x}, \alpha \mathbf{y}$, and $\alpha \mathbf{z}$ is 1 or less.

$$
\alpha \mathbf{x}+\alpha \mathbf{y}+\alpha \mathbf{z} \leq \mathbf{1}
$$

When 1 is exceeded, please consider a reduction of acceleration and work load, or a change of the work load center position and series.

## Example

1. Operating conditions

Model: LEKFS40
Size: 40
Mounting orientation: Horizontal
Acceleration [mm/s²]: 3000
Work load [kg]: 20
Work load center position [mm]: Xc=0, Yc=50, Zc=200
2. Select the graphs for horizontal of the LEKFS40 on page 7.



Mounting orientation


3. $L x=\mathbf{4 0 0} \mathbf{~ m m}, L y=\mathbf{2 5 0} \mathbf{~ m m}, L z=1500 \mathrm{~mm}$
4. The load factor for each direction can be found as follows.

$$
\begin{aligned}
& \alpha x=0 / 400=0 \\
& \alpha y=50 / 250=0.2 \\
& \alpha z=200 / 1500=0.13
\end{aligned}
$$

5. $\alpha \mathbf{x}+\alpha y+\alpha z=0.33 \leq 1$


## LEKFS Series

Table Accuracy (Reference Value)


| Model | Traveling parallelism [mm] (Every 300 mm ) |  |
| :---: | :---: | :---: |
|  | 1) C side traveling <br> parallelism to A side | (2) D side traveling <br> parallelism to B side |
| LEKFS25 | 0.04 | 0.02 |
| LEKFS32 | 0.04 | 0.02 |
| LEKFS40 | 0.04 | 0.02 |

* Traveling parallelism does not include the mounting surface accuracy.


## Table Displacement (Reference Value)




* This displacement is measured when a 15 mm aluminum plate is mounted and fixed on the table.

Battery-less Absolute Encoder:
Electric Actuator
High Rigidity and High Precision Slider Type
LEKFS Series LeKfs25, 32,40



| Nil | In-line |
| :---: | :---: |
| R | Right side parallel |
| L | Left side parallel |

(3) Motor type

| E | Battery-less absolute <br> (Step motor 24 VDC) |
| :--- | :--- |

(4) Lead [mm]

| Symbol | LEKFS25 | LEKFS32 | LEKFS40 |
| :---: | :---: | :---: | :---: |
| H | 20 | 24 | 30 |
| A | 12 | 16 | 20 |
| B | 6 | 8 | 10 |

## (5) Stroke*1

| Size | Stroke |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 100 | 200 | 300 | 400 | 500 | 600 |  |
| 25 | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ | - |  |
| 32 | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ | - |  |
| 40 | - | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ |  |

6 Motor option

(7) Actuator cable type/length

Robotic cable
Robotic cable

| Nil | None | R8 | $8^{* 2}$ |
| :---: | :---: | :---: | :---: |
| R1 | 1.5 | RA | $10^{* 2}$ |
| R3 | 3 | RB | $15^{* 2}$ |
| R5 | 5 | RC | $20^{* 2}$ |

8 Controller

| E |  |
| :---: | :---: |
| $\mathbf{9}$ | EtherCAT® |
| EtherNet/IPTM |  |
| D | PROFINET |
| L | DeviceNetTM |
| M | IO-Link |
| $\mathbf{5}$ | CC-Link Ver. 1.10 |
| $\mathbf{6}$ | Parallel input (NPN) |


*1 Please contact SMC for non-standard strokes as they are produced as special orders.
*2 Order auto switches separately. (For details, refer to the Web Catalog.)
*3 The DIN rail is not included. It must be ordered separately.

## $\triangle$ Caution

## [CE-compliant products]

EMC compliance was tested by combining the electric actuator LEKFS series and the controller JXC series.
The EMC depends on the configuration of the customer's control panel and the relationship with other electrical equipment and wiring. Therefore, compliance with the EMC directive cannot be certified for SMC components incorporated into the customer's equipment under actual operating conditions. As a result, it is necessary for the customer to verify compliance with the EMC directive for the machinery and equipment as a whole.
[UL-compliant products]
The JXC series controllers used in combination with electric actuators are UL certified.
[Precautions relating to differences in controller versions]
When the JXC series is to be used in combination with the battery-less absolute encoder, use a controller that is version V3.4 or S3.4 or higher. For details, refer to the Web Catalog.
*4 Select "Nil" for anything other than DeviceNet ${ }^{\text {TM }}$, CC-Link, or parallel input.
Select "Nil," "S," or "T" for DeviceNet™ or CC-Link.
Select "Nil," "1," "3," or " 5 " for parallel input.

## Trademark

EtherNet/IPTM is a trademark of ODVA.
DeviceNet ${ }^{\text {TM }}$ is a trademark of ODVA.
EtherCAT® ${ }^{\circledR}$ is registered trademark and patented technology, licensed by Beckhoff Automation GmbH, Germany.

| Type | EtherCAT ${ }^{\circledR}$ direct input type | EtherNet//PTM direct input type | PROFINET direct input type | DeviceNet ${ }^{\text {TM }}$ direct input type | IO-Link direct input type | CC-Link direct input type | Step data input type |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Series | JXCE1 | JXC91 | JXCP1 | JXCD1 | JXCL1 | JXCM1 | $\begin{aligned} & \hline \text { JXC51 } \\ & \text { JXC61 } \\ & \hline \end{aligned}$ |
| Features | EtherCAT® ${ }^{\circledR}$ direct input | EtherNet/IPTM direct input | PROFINET direct input | DeviceNet ${ }^{\text {TM }}$ direct input | IO-Link direct input | CC-Link direct input | Parallel I/O |
| Compatible motor | Battery-less absolute (Step motor 24 VDC) |  |  |  |  |  |  |
| Max. number of step data | 64 points |  |  |  |  |  |  |
| Power supply voltage | 24 VDC |  |  |  |  |  |  |

## Specifications

## Battery-less Absolute (Step Motor 24 VDC)

| Model |  |  |  |  | LEKFS25 |  |  | LEKFS32 |  |  | LEKFS40 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Stroke [mm] |  |  |  | 100 to 500 |  |  | 100 to 500 |  |  | 200 to 600 |  |  |
|  | Work load [kg]*1 |  |  | Horizontal | 12 | 25 | 30 | 20 | 45 | 50 | 25 | 55 | 65 |
|  |  |  |  | Vertical | 0.5 | 7.5 | 15 | 4 | 10 | 20 | 2 | 2 | 23 |
|  | Speed*1 <br> [mm/s] | In-line | Stroke range | Up to 500 | 20 to 1100 | 12 to 750 | 6 to 400 | 24 to 1200 | 16 to 800 | 8 to 400 | 30 to 1200 | 20 to 850 | 10 to 300 |
|  |  | He |  | 501 to 600 | - | - | - | - | - | - | 30 to 1200 | 20 to 850 | 10 to 300 |
|  |  | Paralle | Stroke range | Up to 500 | 20 to 900 | 12 to 600 | 6 to 300 | 24 to 800 | 16 to 650 | 8 to 325 | 30 to 750 | 20 to 550 | 10 to 300 |
|  |  |  |  | 501 to 600 | - | - | - | - | - | - | 30 to 750 | 20 to 550 | 10 to 300 |
|  | Max. acceleration/deceleration [mm/s ${ }^{2}$ ] |  |  |  | 3000 |  |  |  |  |  |  |  |  |
|  | Positioning repeatability [mm] |  |  |  | $\pm 0.01$ (Lead H: $\pm 0.02$ ) |  |  |  |  |  |  |  |  |
|  | Lost motion [mm]*2 |  |  |  | 0.05 |  |  |  |  |  |  |  |  |
|  | Lead [mm] |  |  |  | 20 | 12 | 6 | 24 | 16 | 8 | 30 | 20 | 10 |
|  | Impact/Vibration resistance $\left[\mathrm{m} / \mathrm{s}^{2}\right]^{* 3}$ |  |  |  | 50/20 |  |  |  |  |  |  |  |  |
|  | Actuation type |  |  |  | Ball screw |  |  |  |  |  |  |  |  |
|  | Guide type |  |  |  | Linear guide |  |  |  |  |  |  |  |  |
|  | Operating temperature range [ ${ }^{\circ} \mathrm{C}$ ] |  |  |  | 5 to 40 |  |  |  |  |  |  |  |  |
|  | Operating humidity range [\%RH] |  |  |  | 90 or less (No condensation) |  |  |  |  |  |  |  |  |
|  | Motor size |  |  |  | $\square 42$ |  |  | $\square 56.4$ |  |  |  |  |  |
| $\stackrel{\overline{0}}{\overline{0}}$ | Motor type |  |  |  | Battery-less absolute (Step motor 24 VDC) |  |  |  |  |  |  |  |  |
| 足 | Encoder |  |  |  | Battery-less absolute (4096 pulse/rotation) |  |  |  |  |  |  |  |  |
| $\stackrel{0}{0}$ | Rated voltage [V] |  |  |  | 24 VDC $\pm 10 \%$ |  |  |  |  |  |  |  |  |
| $\stackrel{\infty}{0}$ | Power consumption [W]*4 |  |  |  | 38 |  |  | 50 |  |  | 100 |  |  |
|  | Standby power consumption when operating [W] ${ }^{* 5}$ |  |  |  | 16 |  |  | 44 |  |  | 43 |  |  |
|  | Max. instantaneous power consumption [W]** |  |  |  | 57 |  |  | 123 |  |  | 141 |  |  |
|  | Type*7 |  |  |  | Non-magnetizing lock |  |  |  |  |  |  |  |  |
|  | Holding force [ N ] |  |  |  | 47 | 78 | 157 | 72 | 108 | 216 | 75 | 113 | 225 |
|  | Power consumption [W]*8 |  |  |  | 5 |  |  | 5 |  |  | 5 |  |  |
|  | Rated voltage [V] |  |  |  | 24 VDC $\pm 10 \%$ |  |  |  |  |  |  |  |  |

*1 Speed changes according to the work load. Check the "Speed-Work Load Graph (Guide)" on pages 5 and 6.
Furthermore, if the cable length exceeds 5 m , then it will decrease by up to $10 \%$ for each 5 m .
*2 A reference value for correcting errors in reciprocal operation
*3 Impact resistance: No malfunction occurred when the actuator was tested with a drop tester in both an axial direction and a perpendicular direction to the lead screw. (The test was performed with the actuator in the initial state.)
Vibration resistance: No malfunction occurred in a test ranging between 45 to 2000 Hz . The test was performed in both an axial direction and a perpendicular direction to the lead screw. (The test was performed with the actuator in the initial state.)
*4 The power consumption (including the controller) is for when the actuator is operating.
*5 The standby power consumption when operating (including the controller) is for when the actuator is stopped in the set position during the operation.
*6 The max. instantaneous power consumption (including the controller) is for when the actuator is operating. This value can be used for the selection of the power supply.
*7 With lock only
*8 For an actuator with lock, add the power consumption for the lock.

## Dimensions: In-line Motor

## LEKFS25E


*1 When mounting the actuator using the body mounting reference plane, set the height of the opposite surface or pin to be 3 mm or more. (Recommended height: 5 mm )
In addition, be aware that surfaces other than the body mounting reference plane (B dimension range) may slightly protrude from the body mounting reference plane. Be sure to provide a clearance of 1 mm or more to avoid interference with workpieces, facilities, etc.
*2 This is the distance within which the table can move when it returns to origin. Make sure workpieces mounted on the table do not interfere with other workpieces or the facilities around the table.
*3 Position after returning to origin
*4 [] for when the direction of return to origin has changed
*5 When using the positioning pin holes on the bottom, use either the one on the body side or the one on the housing side.

| Dimensions |  |  |  |  |  |  |  |  |  | [mm] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model | L |  | A | B | n | D | E | F | G |  |
|  | Without lock | With lock |  |  |  |  |  |  |  | H |
| LEKFS25E $\square$-100 $\square$ | 335.5 | 380.5 | 106 | 210 | 4 | - | - | 35 | 100 | 45 |
| LEKFS25E $\square$-200 $\square$ | 435.5 | 480.5 | 206 | 310 | 6 | 2 | 240 |  | 220 |  |
| LEKFS25E $\square$-300 $\square$ | 535.5 | 580.5 | 306 | 410 | 8 | 3 | 360 |  | 340 |  |
| LEKFS25E $\square$-400 $\square$ | 635.5 | 680.5 | 406 | 510 | 8 | 3 | 360 |  | 340 |  |
| LEKFS25E $\square$-500 $\square$ | 735.5 | 780.5 | 506 | 610 | 10 | 4 | 480 |  | 460 |  |

Battery-less Absolute (Step Motor 24 VDC)

## Dimensions: In-line Motor

## LEKFS32E



Motor option: With lock

*1 When mounting the actuator using the body mounting reference plane, set the height of the opposite surface or pin to be 3 mm or more. (Recommended height: 5 mm )
In addition, be aware that surfaces other than the body mounting reference plane (B dimension range) may slightly protrude from the body mounting reference plane. Be sure to provide a clearance of 1 mm or more to avoid interference with workpieces, facilities, etc.
*2 This is the distance within which the table can move when it returns to origin. Make sure workpieces mounted on the table do not interfere with other workpieces or the facilities around the table.
*3 Position after returning to origin
*4 [ ] for when the direction of return to origin has changed
*5 A switch spacer (BMY3-016) is required to secure auto switches. Please order it separately.
*6 When using the positioning pin holes on the bottom, use either the one on the body side or the one on the housing side.

| Dimensions |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model |  | L |  | A | Bm] |  |  |  |
|  | Without lock | With lock | A | B | $\mathbf{n}$ | D | E | G |
| LEKFS32E $\square-100 \square$ | 382 | 434 | 106 | 230 | 4 | - | - | 130 |
| LEKFS32E $\square-200 \square$ | 482 | 534 | 206 | 330 | 6 | 2 | 300 | 280 |
| LEKFS32E $\square-300 \square$ | 582 | 634 | 306 | 430 | 6 | 2 | 300 | 280 |
| LEKFS32E $\square-400 \square$ | 682 | 734 | 406 | 530 | 8 | 3 | 450 | 430 |
| LEKFS32E $\square-500 \square$ | 782 | 834 | 506 | 630 | 10 | 4 | 600 | 580 |
| LEKFS32E $\square-600 \square$ | 882 | 934 | 606 | 730 | 10 | 4 | 600 | 580 |

## Dimensions: In-line Motor



Motor option: With lock

*1 When mounting the actuator using the body mounting reference plane, set the height of the opposite surface or pin to be 3 mm or more. (Recommended height: 5 mm )
In addition, be aware that surfaces other than the body mounting reference plane (B dimension range) may slightly protrude from the body mounting reference plane. Be sure to provide a clearance of 1 mm or more to avoid interference with workpieces, facilities, etc.
*2 This is the distance within which the table can move when it returns to origin. Make sure workpieces mounted on the table do not interfere with other workpieces or the facilities around the table.
*3 Position after returning to origin
*4 [ ] for when the direction of return to origin has changed
*5 A switch spacer (BMY3-016) is required to secure auto switches. Please order it separately.
*6 When using the positioning pin holes on the bottom, use either the one on the body side or the one on the housing side.

| Dimensions |  |  |  |  |  |  |  | [mm |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model | L |  | A | B | n | D | E | G |
|  | Without lock | With lock |  |  |  |  |  |  |
| LEKFS40E $\square$-200 $\square$ | 556 | 605 | 206 | 378 | 6 | 2 | 300 | 280 |
| LEKFS40E $\square$-300 $\square$ | 656 | 705 | 306 | 478 | 6 | 2 | 300 | 280 |
| LEKFS40E $\square$-400 $\square$ | 756 | 805 | 406 | 578 | 8 | 3 | 450 | 430 |
| LEKFS40E $\square$-500 $\square$ | 856 | 905 | 506 | 678 | 10 | 4 | 600 | 580 |
| LEKFS40E $\square$-600 $\square$ | 956 | 1005 | 606 | 778 | 10 | 4 | 600 | 580 |

Battery-less Absolute (Step Motor 24 VDC)

## Dimensions: Motor Parallel

## LEKFS25R



L


Motor mounting position: Rights side parallel Motor mounting position: Left side parallel

*1 When mounting the actuator using the body mounting reference plane, set the height of the opposite surface or pin to be 3 mm or more. (Recommended height: 5 mm ) In addition, be aware that surfaces other than the body mounting reference plane (B dimension range) may slightly protrude from the body mounting reference plane. Be sure to provide a clearance of 1 mm or more to avoid interference with workpieces, facilities, etc.
*2 This is the distance within which the table can move when it returns to origin. Make sure workpieces mounted on the table do not interfere with other workpieces or the facilities around the table.
*3 Position after returning to origin
*4 [] for when the direction of return to origin has changed
*5 When using the positioning pin holes on the bottom, use either the one on the body side or the one on the housing side.

* This illustration shows the motor mounting position for the right side parallel type.

| Model | L | A | B | n | D | E | F | G | H |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LEKFS25 $\square \square$-100 $\square$ | 260.5 | 106 | 210 | 4 | - | - | 35 | 100 | 45 |
| LEKFS25 $\square \square$-200 $\square$ | 360.5 | 206 | 310 | 6 | 2 | 240 |  | 220 |  |
| LEKFS25 $\square \square$-300 $\square$ | 460.5 | 306 | 410 | 8 | 3 | 360 |  | 340 |  |
| LEKFS25 $\square \square$-400 $\square$ | 560.5 | 406 | 510 | 8 | 3 | 360 |  | 340 |  |
| LEKFS25 $\square \square$-500 $\square$ | 660.5 | 506 | 610 | 10 | 4 | 480 |  | 460 |  |

Dimensions: Motor Parallel

## LEKFS32R



[^0]Dimensions

| Model | L | A | B | n | D | E | G |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LEKFS32 $\square \square-100 \square$ | 295 | 106 | 230 | 4 | - | - | 130 |
| LEKFS32 $\square \square-200 \square$ | 395 | 206 | 330 | 6 | 2 | 300 | 280 |
| LEKFS32 $\square \square-300 \square$ | 495 | 306 | 430 | 6 | 2 | 300 | 280 |
| LEKFS32 $\square-\mathbf{- 4 0 0} \square$ | 595 | 406 | 530 | 8 | 3 | 450 | 430 |
| LEKFS32 $\square \square-500 \square$ | 695 | 506 | 630 | 10 | 4 | 600 | 580 |

Battery-less Absolute (Step Motor 24 VDC)

Dimensions: Motor Parallel

## LEKFS40R


*1 When mounting the actuator using the body mounting reference plane, set the height of the opposite surface or pin to be 3 mm or more. (Recommended height: 5 mm ) In addition, be aware that surfaces other than the body mounting reference plane ( B dimension range) may slightly protrude from the body mounting reference plane. Be sure to provide a clearance of 1 mm or more to avoid interference with workpieces, facilities, etc.
*2 This is the distance within which the table can move when it returns to origin. Make sure workpieces mounted on the table do not interfere with other workpieces or the facilities around the table.
*3 Position after returning to origin
*4 [ ] for when the direction of return to origin has changed
*5 A switch spacer (BMY3-016) is required to secure auto switches. Please order it separately.
*6 When using the positioning pin holes on the bottom, use either the one on the body side or the one on the housing side.

* This illustration shows the motor mounting position for the right side parallel type.
Dimensions

| Model | L | A | B | n | D | E | G |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LEKFS40 $\square-200 \square$ | 453.4 | 206 | 378 | 6 | 2 | 300 | 280 |
| LEKFS40 $\square \mathbf{- 3 0 0} \square$ | 553.4 | 306 | 478 | 6 | 2 | 300 | 280 |
| LEKFS40 $\square-400 \square$ | 653.4 | 406 | 578 | 8 | 3 | 450 | 430 |
| LEKFS40 $\square-500 \square$ | 753.4 | 506 | 678 | 10 | 4 | 600 | 580 |
| LEKFS40 $\square-600 \square$ | 853.4 | 606 | 778 | 10 | 4 | 600 | 580 |

## Electric Actuator

High Rigidity and High Precision Slider Type

[^1]
[^0]:    *1 When mounting the actuator using the body mounting reference plane, set the height of the opposite surface or pin to be 3 mm or more. (Recommended height: 5 mm ) In addition, be aware that surfaces other than the body mounting reference plane (B dimension range) may slightly protrude from the body mounting reference plane. Be sure to provide a clearance of 1 mm or more to avoid interference with workpieces, facilities, etc.
    *2 This is the distance within which the table can move when it returns to origin. Make sure workpieces mounted on the table do not interfere with other workpieces or the facilities around the table.
    *3 Position after returning to origin
    *4 [] for when the direction of return to origin has changed
    *5 A switch spacer (BMY3-016) is required to secure auto switches. Please order it separately.
    *6 When using the positioning pin holes on the bottom, use either the one on the body side or the one on the housing side

    * This illustration shows the motor mounting position for the right side parallel type.

[^1]:    Safety Instructions Be sure to read the "Handling Precautions for SMC Products" (M-E03-3) and "Operation Manual" before use

