Step Motor (Servo/24 VDC)  Servo Motor (24 VDC)
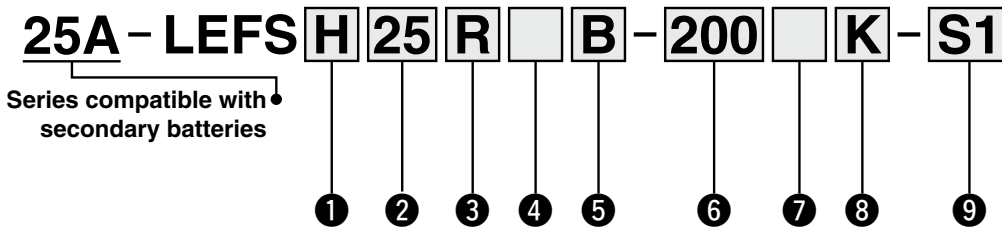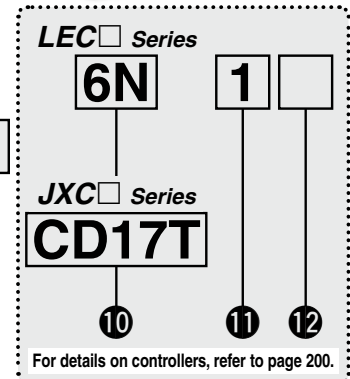
# Electric Actuator/Slider Type
## Ball Screw Drive  Secondary Battery Compatible

## *25A-LEFS* Series  LEFS16, 25, 32, 40

CE c**RU**us  RoHS

## How to Order

25A－LEFS **H** **25** **R** ☐ **B**－**200** ☐ **K**－**S1**

Series compatible with secondary batteries

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽ ❾

*LEC*☐ *Series*
**6N** **1** ☐

*JXC*☐ *Series*
**CD17T**

❿ ⓫ ⓬

For details on controllers, refer to page 200.

### ❶ Accuracy

| Nil | Basic type |
|-----|-----|
| H | High-precision type |

### ❷ Size

| 16 |
|-----|
| 25 |
| 32 |
| 40 |

### ❸ Motor mounting position

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

### ❺ Lead [mm]

| Symbol | LEFS16 | LEFS25 | LEFS32 | LEFS40 |
|-----|-----|-----|-----|-----|
| A | 10 | 12 | 16 | 20 |
| B | 5 | 6 | 8 | 10 |

### ❹ Motor type

| Symbol | Type | Applicable size | | | | Compatible controller/driver |
|-----|-----|-----|-----|-----|-----|-----|
| | | LEFS16 | LEFS25 | LEFS32 | LEFS40 | |
| Nil | Step motor (Servo/24 VDC) | ● | ● | ● | ● | LECP6  JXCE1<br>LECP1  JXC91<br>LECPA  JXCP1<br>LECPMJ  JXCD1<br>JXCL1 |
| A | Servo motor (24 VDC) | ● | ● | — | — | LECA6 |

### ❻ Stroke[1] [mm]

| Stroke | Note | |
|-----|-----|-----|
| | Size | Applicable stroke |
| 50 to 500 | 16 | 50, 100, 150, 200, 250, 300, 350, 400, 450, 500 |
| 50 to 600 | 25 | 50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600 |
| 50 to 800 | 32 | 50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800 |
| 150 to 1000 | 40 | 150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800, 850, 900, 950, 1000 |

### ❼ Motor option

| Nil | Without option |
|-----|-----|
| B | With lock |

### ❽ Positioning pin hole

| Nil | Housing B bottom[2] | Housing B bottom |
|-----|-----|-----|
| K | Body bottom 2 locations | Body bottom |

### ❾ Actuator cable type/length[4]

Standard cable [m]

| Nil | None |
|-----|-----|
| S1 | 1.5[6] |
| S3 | 3[6] |
| S5 | 5[6] |

Robotic cable  [m]

| R1 | 1.5 | RA | 10[3] |
|-----|-----|-----|-----|
| R3 | 3 | RB | 15[3] |
| R5 | 5 | RC | 20[3] |
| R8 | 8[3] | | |

**Support Guide/*LEFG* Series**
The support guide was designed to support workpieces with significant overhang.
p. 117
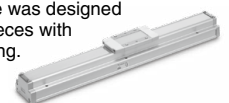
199

**⊘SMC**

## LEC☐ Series (For details, refer to page 201.)

**6N 1 ☐**

⑩ ⑪ ⑫
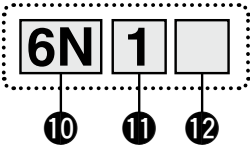
### ⑩ Controller/Driver type*5

| Nil | Without controller/driver | |
|---|---|---|
| 6N | **LECP6/LECA6** | NPN |
| 6P | (Step data input type) | PNP |
| 1N | **LECP1**＊6 | NPN |
| 1P | (Programless type) | PNP |
| MJ | **LECPMJ**＊6 ＊7 (CC-Link direct input type) | — |
| AN | **LECPA**＊6 ＊8 | NPN |
| AP | (Pulse input type) | PNP |

### ⑪ I/O cable length*9, Communication plug

| Nil | Without cable (Without communication plug connector)＊11 |
|---|---|
| 1 | 1.5 m |
| 3 | 3 m＊10 |
| 5 | 5 m＊10 |
| S | Straight type communication plug connector＊11 |
| T | T-branch type communication plug connector＊11 |

### ⑫ Controller/Driver mounting

| Nil | Screw mounting |
|---|---|
| D | DIN rail＊12 |

## JXC☐ Series (For details, refer to page 201.)

### ⑩ Controller

| Nil | Without controller |
|---|---|
| C☐1☐☐ | With controller |

**C D 1 7 T**

**Communication protocol**

| E | EtherCAT® |
|---|---|
| 9 | EtherNet/IP™ |
| P | PROFINET |
| D | DeviceNet™ |
| L | IO-Link |

**For single axis**

**Mounting**

| 7 | Screw mounting |
|---|---|
| 8＊12 | DIN rail |

**Communication plug connector for DeviceNet™**＊13

| Nil | Without plug connector |
|---|---|
| S | Straight type |
| T | T-branch type |

---

＊1 Please consult with SMC for non-standard strokes as they are produced as special orders.
＊2 Refer to the body mounting example on page 205 for the mounting method.
＊3 Produced upon receipt of order (Robotic cable only)
＊4 The standard cable should only be used on fixed parts.
For use on moving parts, select the robotic cable.
＊5 For details on controllers/drivers and compatible motors, refer to the compatible controller/driver on the next page.
＊6 Only available for the motor type "Step motor"
＊7 Not compliant with CE

＊8 When pulse signals are open collector, order the current limiting resistor (LEC-PA-R-☐) on page 236 separately.
＊9 When "Without controller/driver" is selected for controller/driver types, I/O cable cannot be selected. Refer to page 215 (For LECP6/LECA6), page 229 (For LECP1), or page 236 (For LECPA) if I/O cable is required.
＊10 When "Pulse input type" is selected for controller/driver types, pulse input usable only with differential. Only 1.5 m cables usable with open collector
＊11 For the LECPMJ, only "Nil," "S," and "T" are selectable since I/O cable is not included.
＊12 The DIN rail is not included. Order it separately.
＊13 Select "Nil" for anything other than DeviceNet™.

### ⚠Caution

**[CE-compliant products]**
① EMC compliance was tested by combining the electric actuator LEF series and the controller LEC/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.
② For the servo motor (24 VDC) specification, EMC compliance was tested by installing a noise filter set (LEC-NFA). Refer to page 215 for the noise filter set. Refer to the LECA series Operation Manual for installation.
③ CC-Link direct input type (LECPMJ) is not CE-compliant.
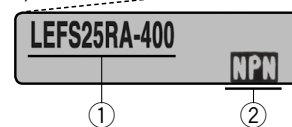**[UL-compliant products (For the LEC series)]**
When compliance with UL is required, the electric actuator and controller/driver should be used with a UL1310 Class 2 power supply.

### The actuator and controller/driver are sold as a package.

Confirm that the combination of the controller/driver and actuator is correct.
**<Check the following before use.>**
① Check the actuator label for the model number (after "25A-"). This number should match that of the controller/driver.
② Check that the Parallel I/O configuration matches (NPN or PNP).

**LEFS25RA-400**   **NPN**
① ②

＊ Refer to the Operation Manual for using the products. Please download it via our website, https://www.smcworld.com

# 25A-LEFS Series

Step Motor (Servo/24 VDC)　Servo Motor (24 VDC)　Secondary Battery Compatible

## Compatible Controller/Driver

### LEC□ Series

| Type | Step data input type | Step data input type | CC-Link direct input type | Programless type | Pulse input type |
|---|---|---|---|---|---|
| |  |  |  |  |  |
| Series | LECP6 | LECA6 | LECPMJ | LECP1 | LECPA |
| Features | Value (Step data) input Standard controller | | CC-Link direct input | Capable of setting up operation (step data) without using a PC or teaching box | Operation by pulse signals |
| Compatible motor | Step motor (Servo/24 VDC) | Servo motor (24 VDC) | Step motor (Servo/24 VDC) | | |
| Max. number of step data | 64 points | | | 14 points | — |
| Power supply voltage | 24 VDC | | | | |
| Reference page | 207 | 207 | 240 | 223 | 230 |

### JXC□ Series

| Type | EtherCAT® direct input type | EtherNet/IP™ direct input type | PROFINET direct input type | DeviceNet™ direct input type | IO-Link direct input type |
|---|---|---|---|---|---|
| |  |  |  |  |  |
| Series | JXCE1 | JXC91 | JXCP1 | JXCD1 | JXCL1 |
| Features | EtherCAT® direct input | EtherNet/IP™ direct input | PROFINET direct input | DeviceNet™ direct input | IO-Link direct input |
| Compatible motor | Step motor (Servo/24 VDC) | | | | |
| Max. number of step data | 64 points | | | | |
| Power supply voltage | 24 VDC | | | | |
| Reference page | 248 | | | | |

SMC

AC Servo Motor | LECS□ Series

Model Selection
Step Motor (Servo/24 VDC)/Servo Motor (24 VDC) | LEFS
LEFB
AC Servo Motor | LEFS
LEFB
Environment | 11-LEFS | 11-LEFG | 25A-LEFS
LECA6 LECP6
Step Motor (Servo/24 VDC)/Servo Motor (24 VDC) | LEC-G | LECP1 | LECPA | LECPMJ | JXC□
AC Servo Motor | LECS□ | LECY□
Specific Product Precautions

# Electric Actuator/Slider Type
# Ball Screw Drive  [Secondary Battery Compatible]

# 25A-LEFS Series  LEFS25, 32, 40

Refer to page 45 for model selection.

LECY□ Series ▶ p. 203

CE  c(UL)US  RoHS
* See the table below.

## How to Order

25A-LEFS **H** **32** **R** **S3** **B** – **200** ☐ **K** – **S** **2** **A2** ☐

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽ ❾ ❿ ⓫ ⓬

Series compatible with secondary batteries

### ❶ Accuracy

| Nil | Basic type |
|-----|-----------|
| H | High-precision type |

### ❷ Size

| 25 |
|----|
| 32 |
| 40 |

### ❸ Motor mounting position

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

### ❹ Motor type

| Symbol | Type | Output [W] | Actuator size | Compatible driver | UL-compliant |
|--------|------|-----------|---------------|-------------------|--------------|
| S2[*1] | AC servo motor (Incremental encoder) | 100 | 25 | LECSA□-S1 | — |
| S3 | | 200 | 32 | LECSA□-S3 | — |
| S4 | | 400 | 40 | LECSA2-S4 | — |
| S6[*1] | AC servo motor (Absolute encoder) | 100 | 25 | LECSB□-S5 LECSC□-S5 LECSS□-S5 | — |
| S7 | | 200 | 32 | LECSB□-S7 LECSC□-S7 LECSS□-S7 | — |
| S8 | | 400 | 40 | LECSB2-S8 LECSC2-S8 LECSS2-S8 | — |
| T6[*2, *3] | AC servo motor (Absolute encoder) | 100 | 25 | LECSB2-T5 LECSC2-T5 | — |
| | | | | LECSS2-T5 | ●[*3] |
| T7[*3] | | 200 | 32 | LECSB2-T7 LECSC2-T7 | — |
| | | | | LECSS2-T7 | ●[*3] |
| T8[*3] | | 400 | 40 | LECSB2-T8 LECSC2-T8 | — |
| | | | | LECSS2-T8 | ●[*3] |

*1 For motor type S2 and S6, the compatible driver part number suffixes are S1 and S5 respectively.
*2 For motor type T6, the compatible driver part number suffix is T5.
*3 The only compatible drivers complaint with UL standards are the LECSS2-T5, LECSS2-T7, and LECSS2-T8.

### ❺ Lead [mm]

| Symbol | 25A-LEFS25 | 25A-LEFS32 | 25A-LEFS40 |
|--------|-----------|-----------|-----------|
| A | 12 | 16 | 20 |
| B | 6 | 8 | 10 |

### ❻ Stroke [mm]

| 50 | 50 |
|----|----|
| to | to |
| 1000 | 1000 |

* For details, refer to the applicable stroke table below.

### ❽ Positioning pin hole

| Nil | Housing B bottom[*1] | Housing B bottom |
|-----|----------------------|------------------|
| K | Body bottom 2 locations | Body bottom |

*1 Refer to the body mounting example on page 205 for the mounting method.

### ❿ Cable length[*1] [m]

| Nil | Without cable |
|-----|---------------|
| 2 | 2 |
| 5 | 5 |
| A | 10 |

*1 The length of the encoder, motor and lock cables are the same.

### ⓬ I/O cable length [m][*3]

| Nil | Without cable |
|-----|---------------|
| H | Without cable (Connector only) |
| 1 | 1.5 |

*3 When "Without driver" is selected for driver type, only "Nil: Without cable" can be selected. Refer to page 289 if I/O cable is required. (Options are shown on page 289.)

### ❼ Motor option

| Nil | Without option |
|-----|----------------|
| B | With lock |

### ❾ Cable type[*1] [*2]

| Nil | Without cable |
|-----|---------------|
| S | Standard cable |
| R | Robotic cable (Flexible cable) |

*1 The motor and encoder cables are included. (The lock cable is also included when the motor with lock option is selected.)
*2 Standard cable entry direction is
· Parallel: (A) Axis side
· In-line: (B) Counter axis side

### ⓫ Driver type

| | Compatible driver | Power supply voltage [V] | Size 25 | Size 32 | Size 40 | UL-compliant |
|---|-------------------|--------------------------|---------|---------|---------|--------------|
| Nil | Without driver | — | ● | ● | ● | — |
| A1 | LECSA1-S□ | 100 to 120 | ● | ● | — | — |
| A2 | LECSA2-S□ | 200 to 230 | ● | ● | — | — |
| B1 | LECSB1-S□ | 100 to 120 | ● | ● | — | — |
| B2 | LECSB2-S□ | 200 to 230 | ● | ● | — | — |
| | LECSB2-T□ | 200 to 240 | ● | ● | — | — |
| C1 | LECSC1-S□ | 100 to 120 | ● | ● | — | — |
| C2 | LECSC2-S□ | 200 to 230 | ● | ● | — | — |
| | LECSC2-T□ | | ● | ● | — | — |
| S1 | LECSS1-S□ | 100 to 120 | ● | ● | — | — |
| S2 | LECSS2-S□ | 200 to 230 | ● | ● | — | — |
| | LECSS2-T□ | 200 to 240 | ● | ● | ● | — |

* When a driver type is selected, a cable is included. Select the cable type and cable length.
Example) S2S2: Standard cable (2 m) + Driver (LECSS2)
S2 : Standard cable (2 m)
Nil : Without cable and driver

## Applicable Stroke Table

| Stroke [mm] / Model | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 | 950 | 1000 | Manufacturable stroke range [mm] |
|---------------------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| 25A-LEFS25 | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | — | — | — | — | — | — | — | — | 50 to 600 |
| 25A-LEFS32 | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | — | — | — | — | 50 to 800 |
| 25A-LEFS40 | — | — | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | 150 to 1000 |

●: Standard

* Please consult with SMC for non-standard strokes as they are produced as special orders.

* The 25A- series specifications and dimensions are the same as those of the standard model.

## Compatible Driver

| Driver type | Pulse input type/ Positioning type | Pulse input type | CC-Link direct input type | SSCNETⅢ type | Pulse input type | CC-Link direct input type | SSCNETⅢ/H type |
|-------------|-----------------------------------|------------------|---------------------------|--------------|------------------|---------------------------|----------------|
| Series | LECSA | LECSB | LECSC | LECSS | LECSB-T | LECSC-T | LECSS-T |
| Number of point tables | Up to 7 | — | Up to 255 (2 stations occupied) | — | Up to 255 | Up to 255 (2 stations occupied) | — |
| Pulse input | ○ | ○ | — | — | ○ | — | — |
| Applicable network | — | — | CC-Link | SSCNETⅢ | — | CC-Link | SSCNET Ⅲ/H |
| Control encoder | Incremental 17-bit encoder | Absolute 18-bit encoder | Absolute 18-bit encoder | Absolute 18-bit encoder | Absolute 22-bit encoder | Absolute 18-bit encoder | Absolute 22-bit encoder |
| Communication function | USB communication | USB communication, RS422 communication | USB communication, RS422 communication | USB communication | USB communication, RS422 communication | USB communication | USB communication |
| Power supply voltage [V] | 100 to 120 VAC (50/60 Hz), 200 to 230 VAC (50/60 Hz) | | | | 200 to 240 VAC (50/60 Hz) | 200 to 230 VAC (50/60 Hz) | 200 to 240 VAC (50/60 Hz) |
| Reference page | Click here | | | | | | |

* Copper and zinc materials are used for the motors, cables, controllers/drivers.

SMC

# Electric Actuator/Slider Type
# Ball Screw Drive  Secondary Battery Compatible

## *25A-LEFS* Series  LEFS25, 32, 40

CE  RoHS

Refer to page 53 for model selection.

## How to Order

**25A-LEFS** [H] [32] [R] [V7] [B] – [200] [ ] [K] – [S] [2] [M2] [ ]

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽ ❾ ❿ ⓫ ⓬

Series compatible with secondary batteries

### ❶ Accuracy

| Nil | Basic type |
|---|---|
| H | High-precision type |

### ❷ Size

| 25 |
|---|
| 32 |
| 40 |

### ❸ Motor mounting position

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

### ❺ Lead [mm]

| Symbol | LEFS25 | LEFS32 | LEFS40 |
|---|---|---|---|
| A | 12 | 16 | 20 |
| B | 6 | 8 | 10 |

### ❻ Stroke [mm]

| 50 | 50 |
|---|---|
| to | to |
| 1000 | 1000 |

∗ For details, refer to the applicable stroke table below.

### ❼ Motor option

| Nil | Without option |
|---|---|
| B | With lock |

### ❹ Motor type

| Symbol | Type | Output [W] | Size | Compatible driver |
|---|---|---|---|---|
| V6*1 | AC servo motor (Absolute encoder) | 100 | 25 | LECYM2-V5/LECYU2-V5 |
| V7 | | 200 | 32 | LECYM2-V7/LECYU2-V7 |
| V8 | | 400 | 40 | LECYM2-V8/LECYU2-V8 |

∗1 For motor type V6, the compatible driver part number suffix is V5.

### ❽ Positioning pin hole

| Nil | Housing B bottom*1 | Housing B bottom |
|---|---|---|
| K | Body bottom 2 locations | Body bottom |

∗1 Refer to the body mounting example on page 205 for the mounting method.

### ❿ Cable length*1 [m]

| Nil | Without cable |
|---|---|
| 3 | 3 |
| 5 | 5 |
| A | 10 |
| C | 20 |

∗1 The length of the encoder, motor and lock cables are the same.

### ❾ Cable type*1 *2

| Nil | Without cable |
|---|---|
| S | Standard cable |
| R | Robotic cable (Flexible cable) |

∗1 The motor and encoder cables are included. (The lock cable is also included when the motor with lock option is selected.)
∗2 Standard cable entry direction is
· Parallel: (A) Axis side
· In-line: (B) Counter axis side

### ⓫ Driver type

| | Compatible driver | Power supply voltage [V] |
|---|---|---|
| Nil | Without driver | — |
| M2 | LECYM2-V□ | 200 to 230 |
| U2 | LECYU2-V□ | 200 to 230 |

### ⓬ I/O cable length [m]*3

| Nil | Without cable |
|---|---|
| H | Without cable (Connector only) |
| 1 | 1.5 |

∗3 When "Without driver" is selected for driver type, only "Nil: Without cable" can be selected. Refer to page 302 if I/O cable is required. (Options are shown on page 302.)

## Applicable Stroke Table

●: Standard

| Model \ Stroke [mm] | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 | 950 | 1000 | Manufacturable stroke range [mm] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25A-LEFS25 | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | — | — | — | — | — | — | — | — | 50 to 600 |
| 25A-LEFS32 | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | — | — | — | — | 50 to 800 |
| 25A-LEFS40 | — | — | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | 150 to 1000 |

∗ Please consult with SMC for non-standard strokes as they are produced as special orders.

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

## Compatible Driver

| Driver type | ⊓⊔ MECHATROLINK-Ⅱ type | ⊓⊔ MECHATROLINK-Ⅲ type |
|---|---|---|
| Series | LECYM | LECYU |
| Applicable network | MECHATROLINK-Ⅱ | MECHATROLINK-Ⅲ |
| Control encoder | Absolute 20-bit encoder | |
| Communication device | USB communication, RS-422 communication | |
| Power supply voltage [V] | 200 to 230 VAC (50/60 Hz) | |
| Reference page | 295 | |

∗ Copper and zinc materials are used for the motors, cables, controllers/drivers.

SMC

# Electric Actuator/High Rigidity Slider Type Ball Screw Drive  Secondary Battery Compatible

## *25A-LEJS Series*  LEJS40, 63

**Refer to the Web Catalog for model selection.**

CE  c UL us  RoHS
* See the table below

LECY□ Series ▶ Page 196

## How to Order

**25A-LEJS** **H** **40** **S2** **A** – **500** ☐ – ☐☐☐☐

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽ ❾ ❿

Series compatible with secondary batteries

### ❶ Accuracy

| Nil | Basic type |
|-----|------------|
| H | High-precision type |

### ❷ Size

| 40 |
|----|
| 63 |

### ❺ Stroke [mm]*4

| 200 |
|-----|
| to |
| 1500 |

*4 Refer to the applicable stroke table for details.

### ❻ Motor option

| Nil | Without option |
|-----|----------------|
| B | With lock |

### ❸ Motor type

| Symbol | Type | Output [W] | Actuator size | Compatible driver | UL-compliant |
|--------|------|-----------|---------------|-------------------|--------------|
| S2*1 | AC servo motor (Incremental encoder) | 100 | 40 | LECSA□-S1 | — |
| S3 | AC servo motor (Incremental encoder) | 200 | 63 | LECSA□-S3 | — |
| S6*1 | AC servo motor (Absolute encoder) | 100 | 40 | LECSB□-S5 LECSC□-S5 LECSS□-S5 | — |
| S7 | AC servo motor (Absolute encoder) | 200 | 63 | LECSB□-S7 LECSC□-S7 LECSS□-S7 | — |
| T6*2, *3 | AC servo motor (Absolute encoder) | 100 | 40 | LECSB2-T5 LECSC2-T5 | — |
| | | | | LECSS2-T5 | ●*3 |
| T7*3 | | 200 | 63 | LECSB2-T7 LECSC2-T7 | — |
| | | | | LECSS2-T7 | ●*3 |

*1 For motor type S2 and S6, the compatible driver part number suffixes are S1 and S5 respectively.
*2 For motor type T6, the compatible driver part number suffix is T5.
*3 The only compatible drivers complaint with UL standards are the LECSS2-T5 and LECSS2-T7.

### ❹ Lead [mm]

| Symbol | 25A-LEJS40 | 25A-LEJS63 |
|--------|-----------|-----------|
| H | 24 | 30 |
| A | 16 | 20 |
| B | 8 | 10 |

### ❾ Driver type*6

| | Compatible driver | Power supply voltage [V] | UL-compliant |
|---|-------------------|--------------------------|--------------|
| Nil | Without driver | — | — |
| A1 | LECSA1-S□ | 100 to 120 | — |
| A2 | LECSA2-S□ | 200 to 230 | — |
| B1 | LECSB1-S□ | 100 to 120 | — |
| B2 | LECSB2-S□ | 200 to 230 | — |
| | LECSB2-T□ | 200 to 240 | — |
| C1 | LECSC1-S□ | 100 to 120 | — |
| C2 | LECSC2-S□ | 200 to 230 | — |
| | LECSC2-T□ | 200 to 230 | — |
| S1 | LECSS1-S□ | 100 to 120 | — |
| S2 | LECSS2-S□ | 200 to 230 | — |
| | LECSS2-T□ | 200 to 240 | ● |

*6 When a driver type is selected, a cable is included. Select the cable type and cable length.
Example)
S2S2: Standard cable (2 m) + Driver (LECSS2)
S2 : Standard cable (2 m)
Nil : Without cable and driver

### ❼ Cable type*6, *7, *8

| Nil | Without cable |
|-----|---------------|
| S | Standard cable |
| R | Robotic cable (Flexible cable) |

*7 The motor and encoder cables are included. (The lock cable is included when the motor with lock option is selected.)
*8 Standard cable entry is "(A) Axis side".

### ❽ Cable length [m]*6, *9

| Nil | Without cable |
|-----|---------------|
| 2 | 2 |
| 5 | 5 |
| A | 10 |

*9 The length of the motor, encoder and lock cables are the same.

### ❿ I/O cable length [m]*10

| Nil | Without cable |
|-----|---------------|
| H | Without cable (Connector only) |
| 1 | 1.5 |

*10 When "Without driver" is selected for driver type, only "Nil: Without cable" can be selected. Refer to the Web Catalog if I/O cable is required.

**For auto switches, refer to page 211.**

### Applicable Stroke Table*5
●: Standard

| Model \ Stroke [mm] | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1200 | 1500 |
|---------------------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| 25A-LEJS40 | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | — |
| 25A-LEJS63 | — | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |

*5 Please consult with SMC for non-standard strokes as they are produced as special orders.

* The 25A- series specifications and dimensions are the same as those of the standard model. **Click here for details.**

## Compatible Driver

| Driver type | Pulse input type/ Positioning type | Pulse input type | CC-Link direct input type | SSCNETⅢ type | Pulse Input Type | CC-Link Direct Input Type | SSCNETⅢ/H type |
|-------------|------------------------------------|------------------|---------------------------|--------------|------------------|---------------------------|----------------|
| Series | LECSA | LECSB | LECSC | LECSS | LECSB-T | LECSC-T | LECSS-T |
| Number of point tables | Up to 7 | — | Up to 255 | — | Up to 255 | Up to 255 (2 stations occupied) | — |
| Pulse input | ○ | ○ | — | — | ○ | — | — |
| Applicable network | — | — | CC-Link | SSCNETⅢ | — | CC-Link | SSCNETⅢ/H |
| Control encoder | Incremental 17-bit encoder | Absolute 18-bit encoder | Absolute 18-bit encoder | Absolute 18-bit encoder | Absolute 22-bit encoder | Absolute 18-bit encoder | Absolute 22-bit encoder |
| Communication function | USB communication | USB communication, RS422 communication | USB communication, RS422 communication | USB communication | USB communication, RS422 communication | USB communication | USB communication |
| Power supply voltage [V] | 100 to 120 VAC (50/60 Hz), 200 to 230 VAC (50/60 Hz) | | | | 200 to 240 VAC (50/60 Hz) | 200 to 230 VAC (50/60 Hz) | 200 to 240 VAC (50/60 Hz) |

* Copper and zinc materials are used for the motors, cables, controllers/drivers.

Ⓐ 195

SMC

# Electric Actuator/High Rigidity Slider Type
# Ball Screw Drive  Secondary Battery Compatible

## *25A-LEJS Series*  LEJS40, 63

CE  RoHS

**Refer to the Web Catalog for model selection.**

## How to Order

**25A-LEJS** [H] [40] [V6] [A] − [500] [ ] − [ ] [ ] [ ] [ ]
❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽ ❾ ❿

**Series compatible with secondary batteries**

### ❶ Accuracy

| Nil | Basic type |
|---|---|
| H | High-precision type |

### ❷ Size

| 40 |
|---|
| 63 |

### ❸ Motor type *1

| Symbol | Type | Output [W] | Actuator size | Compatible driver |
|---|---|---|---|---|
| V6 | AC servo motor (Absolute encoder) | 100 | 40 | LECYM2-V5 LECYU2-V5 |
| V7 | AC servo motor (Absolute encoder) | 200 | 63 | LECYM2-V7 LECYU2-V7 |

*1 For motor type V6, the compatible driver part number suffix is V5.

### ❹ Lead [mm]

| Symbol | 25A-LEJS40 | 25A-LEJS63 |
|---|---|---|
| H | 24 | 30 |
| A | 16 | 20 |
| B | 8 | 10 |

### ❺ Stroke [mm]*3

| 200 to 1500 |
|---|

*3 Refer to the applicable stroke table for details.

### ❻ Motor option

| Nil | Without option |
|---|---|
| B | With lock |

### ❼ Cable type*5, *6, *7

| Nil | Without cable |
|---|---|
| S | Standard cable |
| R | Robotic cable (Flexible cable) |

*6 The motor and encoder cables are included. (The lock cable is included when the motor with lock option is selected.)
*7 Standard cable entry is "(A) Axis side".

### ❽ Cable length [m] *5, *6

| Nil | Without cable |
|---|---|
| 3 | 3 |
| 5 | 5 |
| A | 10 |
| C | 20 |

*6 The length of the motor, encoder and lock cables are the same.

### ❾ Driver type *5

| | Compatible driver | Power supply voltage [V] |
|---|---|---|
| Nil | Without driver | — |
| M2 | LECYM2-V□ | 200 to 230 |
| U2 | LECYU2-V□ | 200 to 230 |

*5 When a driver type is selected, a cable is included. Select the cable type and cable length.
Example)
S2S2: Standard cable (2 m) + Driver (LECSS2)
S2  : Standard cable (2 m)
Nil : Without cable and driver

### ❿ I/O cable length [m]*9

| Nil | Without cable |
|---|---|
| H | Without cable (Connector only) |
| 1 | 1.5 |

*9 When "Without driver" is selected for driver type, only "Nil: Without cable" can be selected.
Refer to the **Web Catalog** if I/O cable is required.

### Applicable Stroke Table*4

●: Standard

| Model \ Stroke [mm] | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1200 | 1500 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 25A-LEJS40 | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | — |
| 25A-LEJS63 | — | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |

*4 Please consult with SMC for non-standard strokes as they are produced as special orders.

**Solid state auto switches should be ordered separately. For details about auto switches, refer to page 211.**

**Applicable auto switches**
D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900
D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

* The 25A- series specifications and dimensions are the same as those of the standard model.

**Click here for details.**

### Compatible Driver

| Driver type | **MECHATROLINK-II type** | **MECHATROLINK-III type** |
|---|---|---|
| Series | LECYM | LECYU |
| Applicable network | MECHATROLINK-II | MECHATROLINK-III |
| Control encoder | Absolute 20-bit encoder | |
| Communication device | USB communication, RS-422 communication | |
| Power supply voltage [V] | 200 to 230 VAC (50/60 Hz) | |

* Copper and zinc materials are used for the motors, cables, controllers/drivers.

**SMC**

Step Motor (Servo/24 VDC)   Servo Motor (24 VDC)

# Electric Actuator/ Rod Type   Secondary Battery Compatible
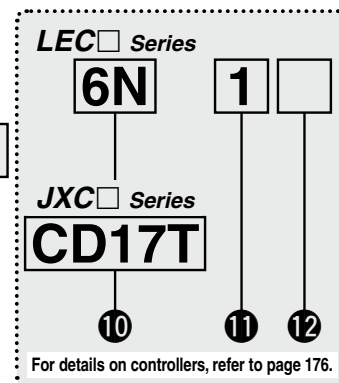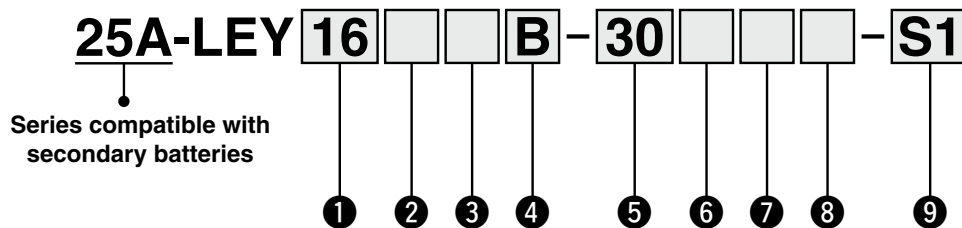
## *25A-LEY* Series   LEY16, 25, 32, 40

CE  cUL us  RoHS

**Dust-tight/Water-jet-proof** ▶ p. 151

## How to Order

Motor mounting position: Top/Parallel   Motor mounting position: In-line

**25A-LEY** | 16 | | | B | – | 30 | | | | –S1

Series compatible with secondary batteries

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽ ❾

*LEC*□ *Series*  6N  1

*JXC*□ *Series*  CD17T

❿ ⓫ ⓬

For details on controllers, refer to page 176.

### ❶ Size

| 16 |
| 25 |
| 32 |
| 40 |

### ❷ Motor mounting position

| Nil | Top mounting |
| R | Right side parallel |
| L | Left side parallel |
| D | In-line |

### ❸ Motor type

| Symbol | Type | Applicable size | | | Compatible controller/driver |
|---|---|---|---|---|---|
| | | **LEY16** | **LEY25** | **LEY32/40** | |
| Nil | Step motor (Servo/24 VDC) | ● | ● | ● | LECP6  JXCE1<br>LECP1  JXC91<br>LECPA  JXCP1<br>LECPMJ  JXCD1<br>        JXCL1 |
| A | Servo motor (24 VDC) | ● | ● | — | LECA6 |

### ❹ Lead [mm]

| Symbol | **LEY16** | **LEY25** | **LEY32/40** |
|---|---|---|---|
| A | 10 | 12 | 16 |
| B | 5 | 6 | 8 |
| C | 2.5 | 3 | 4 |

### ❺ Stroke [mm]

| 30 | 30 |
| to | to |
| 500 | 500 |

∗ For details, refer to the applicable stroke table below.

### ❻ Motor option*2

| Nil | Without option |
| C | With motor cover |
| W | With lock/motor cover |
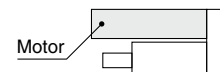
Motor

### ❼ Rod end thread

| Nil | Rod end female thread |
| M | Rod end male thread (1 rod end nut is included.) |

### ❽ Mounting*5

| Symbol | Type | Motor mounting position | |
|---|---|---|---|
| | | Top/Parallel | In-line |
| Nil | Ends tapped/Body bottom tapped*6 | ● | ● |
| L | Foot | ● | — |
| F | Rod flange*6 | ●*8 | ● |
| G | Head flange*6 | ●*9 | — |
| D | Double clevis*7 | ● | — |

### ❾ Actuator cable type/length*11

Standard cable [m]

| Nil | None |
| S1 | 1.5*12 |
| S3 | 3*12 |
| S5 | 5*12 |

Robotic cable [m]

| R1 | 1.5 | RA | 10*10 |
| R3 | 3 | RB | 15*10 |
| R5 | 5 | RC | 20*10 |
| R8 | 8*10 | | |

### Mounting Bracket Part Nos. for the 25A- Series*4

| Applicable size | Foot*3 | Flange | Double clevis |
|---|---|---|---|
| 16 | 25-LEY-L016 | 25-LEY-F016 | 25-LEY-D016 |
| 25 | 25-LEY-L025 | 25-LEY-F025 | 25-LEY-D025 |
| 32, 40 | 25-LEY-L032 | 25-LEY-F032 | 25-LEY-D032 |
| Surface treatment | RAYDENT® | RAYDENT® | Coating (Size 16: Electroless nickel plating) |

**Solid state auto switches should be ordered separately. For details on auto switches, refer to the Web Catalog.**

**Applicable auto switches**
D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900
D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

### Applicable Stroke Table*1

●: Standard

| Model | Stroke [mm] 30 | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | Manufacturable stroke range |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **25A-LEY16** | ● | ● | ● | ● | ● | ● | ● | — | — | — | — | 10 to 300 |
| **25A-LEY25** | ● | ● | ● | ● | ● | ● | ● | ● | ● | — | — | 15 to 400 |
| **25A-LEY32/40** | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | 20 to 500 |

SMC

## LEC☐ Series (For details, refer to page 177.)

**6N | 1 | ☐**

⑩　⑪　⑫
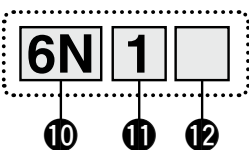
### ⑩ Controller/Driver type*12

| Nil | Without controller/driver | |
|---|---|---|
| 6N | **LECP6/LECA6** | NPN |
| 6P | (Step data input type) | PNP |
| 1N | **LECP1**\*13 | NPN |
| 1P | (Programless type) | PNP |
| MJ | **LECPMJ**\*13 \*14 (CC-Link direct input type) | — |
| AN | **LECPA**\*13 \*15 | NPN |
| AP | (Pulse input type) | PNP |

### ⑪ I/O cable length*16, Communication plug

| Nil | Without cable (Without communication plug connector)\*18 |
|---|---|
| 1 | 1.5 m |
| 3 | 3 m\*17 |
| 5 | 5 m\*17 |
| S | Straight type communication plug connector\*18 |
| T | T-branch type communication plug connector\*18 |

### ⑫ Controller/Driver mounting

| Nil | Screw mounting |
|---|---|
| D | DIN rail\*19 |

## JXC☐ Series (For details, refer to page 177.)

### ⑩ Controller

| Nil | Without controller |
|---|---|
| C☐1☐☐ | With controller |

**C | D | 1 | 7 | T**

**Communication protocol**

| E | EtherCAT® |
|---|---|
| 9 | EtherNet/IP™ |
| P | PROFINET |
| D | DeviceNet™ |
| L | IO-Link |

**For single axis**

**Mounting**

| 7 | Screw mounting |
|---|---|
| 8\*19 | DIN rail |

**Communication plug connector for DeviceNet™**\*20

| Nil | Without plug connector |
|---|---|
| S | Straight type |
| T | T-branch type |

---

*1 Please consult with SMC for non-standard strokes as they are produced as special orders.
*2 When "With lock" or "With lock/motor cover" is selected for the top mounting and right/left side parallel types, the motor body will stick out from the end of the body for size 16/40 with strokes of 30 mm or less. Check for interference with workpieces before selecting a model.
*3 When ordering foot brackets, order 2 pieces per actuator.
*4 Parts belonging to each bracket are as follows.
Foot, Flange: Body mounting bolt, Double clevis: Clevis pin, Type C retaining ring for axis, Body mounting bolt
*5 The mounting bracket is shipped together with the product but does not come assembled.
*6 For the horizontal cantilever mounting of the rod flange, head flange, or ends tapped types, use the actuator within the following stroke range.
·LEY25: 200 mm or less　·LEY32/40: 100 mm or less
*7 For the mounting of the double clevis type, use the actuator within the following stroke range.
·LEY16: 100 mm or less　·LEY25: 200 mm or less　·LEY32/40: 200 mm or less
*8 The rod flange type is not available for the LEY16/40 with a 30 mm stroke and motor option "With lock," "With lock/motor cover."

*9 The head flange type is not available for the LEY32/40.
*10 Produced upon receipt of order (Robotic cable only)
*11 The standard cable should only be used on fixed parts. For use on moving parts, select the robotic cable.
*12 For details on controllers/drivers and compatible motors, refer to the compatible controller/driver on the next page.
*13 Only available for the motor type "Step motor"
*14 Not compliant with CE
*15 When pulse signals are open collector, order the current limiting resistor (LEC-PA-R-☐) on page 218 separately.
*16 When "Without controller/driver" is selected for controller/driver types, I/O cable cannot be selected. Refer to page 197 (For LECP6/LECA6), page 211 (For LECP1), or page 218 (For LECPA) if I/O cable is required.
*17 When "Pulse input type" is selected for controller/driver types, pulse input usable only with differential. Only 1.5 m cables usable with open collector
*18 For the LECPMJ, only "Nil," "S," and "T" are selectable since I/O cable is not included.
*19 The DIN rail is not included. Order it separately.
*20 Select "Nil" for anything other than DeviceNet™.

### ⚠Caution

**[CE-compliant products]**
① EMC compliance was tested by combining the electric actuator LEY series and the controller LEC/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.
② For the servo motor (24 VDC) specification, EMC compliance was tested by installing a noise filter set (LEC-NFA). Refer to page 197 for the noise filter set. Refer to the LECA series Operation Manual for installation.
③ CC-Link direct input type (LECPMJ) is not CE-compliant.

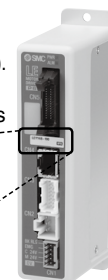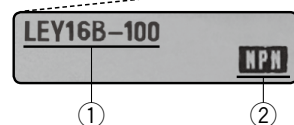**[UL-compliant products (For the LEC series)]**
When compliance with UL is required, the electric actuator and controller/driver should be used with a UL1310 Class 2 power supply.

**The actuator and controller/driver are sold as a package.**
Confirm that the combination of the controller/driver and actuator is correct.

**<Check the following before use.>**
① Check the actuator label for the model number (after "25A-"). This number should match that of the controller/driver.
② Check that the Parallel I/O configuration matches (NPN or PNP).

**LEY16B–100**　**NPN**

① ②

* Refer to the Operation Manual for using the products. Please download it via our website, https://www.smcworld.com

Model Selection
Step Motor (Servo/24 VDC)/Servo Motor (24 VDC) LEY
LEYG
AC Servo Motor LEY
LEYG
Environment LEY-X5
25A-LEY
LECA6 LECP6
LEC-G
Step Motor (Servo/24 VDC)/Servo Motor (24 VDC) LECP1
LECPA
LECPMJ
JXC☐
AC Servo Motor LECS☐
LECY☐
Specific Product Precautions

# 25A-LEY Series

Step Motor (Servo/24 VDC) — Servo Motor (24 VDC) — Secondary Battery Compatible

## Compatible Controller/Driver

### LEC☐ Series

| Type | Step data input type | Step data input type | CC-Link direct input type | Programless type | Pulse input type |
|---|---|---|---|---|---|
| Series | LECP6 | LECA6 | LECPMJ | LECP1 | LECPA |
| Features | Value (Step data) input Standard controller | | CC-Link direct input | Capable of setting up operation (step data) without using a PC or teaching box | Operation by pulse signals |
| Compatible motor | Step motor (Servo/24 VDC) | Servo motor (24 VDC) | Step motor (Servo/24 VDC) | | |
| Max. number of step data | 64 points | | | 14 points | — |
| Power supply voltage | 24 VDC | | | | |
| Reference page | 189 | 189 | 222 | 205 | 212 |

### JXC☐ Series

| Type | EtherCAT® direct input type | EtherNet/IP™ direct input type | PROFINET direct input type | DeviceNet™ direct input type | IO-Link direct input type |
|---|---|---|---|---|---|
| Series | JXCE1 | JXC91 | JXCP1 | JXCD1 | JXCL1 |
| Features | EtherCAT® direct input | EtherNet/IP™ direct input | PROFINET direct input | DeviceNet™ direct input | IO-Link direct input |
| Compatible motor | Step motor (Servo/24 VDC) | | | | |
| Max. number of step data | 64 points | | | | |
| Power supply voltage | 24 VDC | | | | |
| Reference page | 230 | | | | |

SMC

**SMC**

# Electric Actuator/ Rod Type

Secondary Battery Compatible

## *25A-LEY Series*  LEY25, 32  Size  25, 32

CE  c-UL-us  * Refer to the table below.

RoHS

Refer to page 43 for model selection.

## How to Order

25A-LEY │H│25│ │S2│B│–│100│ │ │ │–│S2│2│A1│ │

❶  ❷  ❸ ❹ ❺  ❻  ❼ ❽ ❾  ❿ ⓫ ⓬ ⓭

Series compatible with secondary batteries

### ❶ Accuracy

| Nil | Basic type |
|-----|------------|
| H | High-precision type |

### ❷ Size

| 25 |
|----|
| 32 |

### ❸ Motor mounting position

| Nil | Top mounting |
|-----|--------------|
| R | Right side parallel |
| L | Left side parallel |
| D | In-line |

### ❹ Motor type*1

| Symbol | Type | Output [W] | Actuator size | Compatible drivers*3 | UL-compliant |
|--------|------|-----------|---------------|----------------------|--------------|
| S2*1 | AC servo motor (Incremental encoder) | 100 | 25 | LECSA□-S1 | — |
| S3 | | 200 | 32 | LECSA□-S3 | — |
| S6*1 | AC servo motor (Absolute encoder) | 100 | 25 | LECSB□-S5 LECSC□-S5 LECSS□-S5 | — |
| S7 | | 200 | 32 | LECSB□-S7 LECSC□-S7 LECSS□-S7 | — |
| T6*2, *4 | AC servo motor (Absolute encoder) | 100 | 25 | LECSB2-T5 LECSC2-T5 | — |
| | | | | LECSS2-T5 | ●*4 |
| T7*4 | | 200 | 32 | LECSB2-T7 LECSC2-T7 | — |
| | | | | LECSS2-T7 | ●*4 |

*1 For motor type S2 and S6, the compatible driver part number suffixes are S1 and S5 respectively.
*2 For motor type T6, the compatible driver part number suffix is T5.
*3 **Click here** for details on the driver.
*4 The only compatible drivers complaint with UL standards are the LECSS2-T5 and LECSS2-T7.

### ❺ Lead [mm]

| Symbol | LEY25 | LEY32*1 |
|--------|-------|---------|
| A | 12 | 16 (20) |
| B | 6 | 8 (10) |
| C | 3 | 4 (5) |

*1 The values shown in ( ) are the leads for the size 32 top mounting, right/left side parallel types. (Equivalent leads which include the pulley ratio [1.25:1])

### ❻ Stroke [mm]

| 30 | 30 |
|----|----|
| to | to |
| 500 | 500 |

* For details, refer to the applicable stroke table below.

### ❼ Motor option

| Nil | Without option |
|-----|----------------|
| B | With lock*1 |

*1 When "With lock" is selected for the top mounting and right/left side parallel types, the motor body will stick out from the end of the body for size 25 with strokes of 30 mm or less. Check for interference with workpieces before selecting a model.

Motor

### ❽ Rod end thread

| Nil | Rod end female thread |
|-----|------------------------|
| M | Rod end male thread (1 rod end nut is included.) |

### ❾ Mounting*1

| Symbol | Type | Motor mounting position | |
|--------|------|--------|---------|
| | | Top/Parallel | In-line |
| Nil | Ends tapped/ Body bottom tapped*2 | ● | ● |
| L | Foot | ● | — |
| F | Rod flange*2 | ●*4 | ● |
| G | Head flange*2 | ●*5 | — |
| D | Double clevis*3 | ● | — |

*1 The mounting bracket is shipped together with the product but does not come assembled.
*2 For the horizontal cantilever mounting of the rod flange, head flange, or ends tapped types, use the actuator within the following stroke range.
· 25A-LEY25: 200 mm or less
· 25A-LEY32: 100 mm or less
*3 For the mounting of the double clevis type, use the actuator within the following stroke range.
· 25A-LEY25: 200 mm or less
· 25A-LEY32: 200 mm or less
*4 The rod flange type is not available for the 25A-LEY25 with a 30 mm stroke and motor option "With lock."
*5 The head flange type is not available for the 25A-LEY32.

### Mounting Bracket Part Nos. for the 25A- Series

| Applicable size | Foot*1 | Flange | Double clevis |
|-----------------|--------|--------|---------------|
| 25 | 25-LEY-L025 | 25-LEY-F025 | 25-LEY-D025 |
| 32 | 25-LEY-L032 | 25-LEY-F032 | 25-LEY-D032 |
| Surface treatment | RAYDENT® | RAYDENT® | Coating (Size 16: Electroless nickel plating) |

*1 When ordering foot brackets, order 2 pieces per actuator.
* Parts belonging to each bracket are as follows.
Foot, Flange: Body mounting bolt, Double clevis: Clevis pin, Type C retaining ring for axis, Body mounting bolt

### Applicable Stroke Table

●: Standard

| Stroke [mm] Model | 30 | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | Manufacturable stroke range [mm] |
|-------------------|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------------------------|
| 25A-LEY25 | ● | ● | ● | ● | ● | ● | ● | ● | ● | — | — | 15 to 400 |
| 25A-LEY32 | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | 20 to 500 |

* Please consult with SMC for non-standard strokes as they are produced as special orders.

Solid state auto switches should be ordered separately. For details on auto switches, refer to the **Web Catalog**.
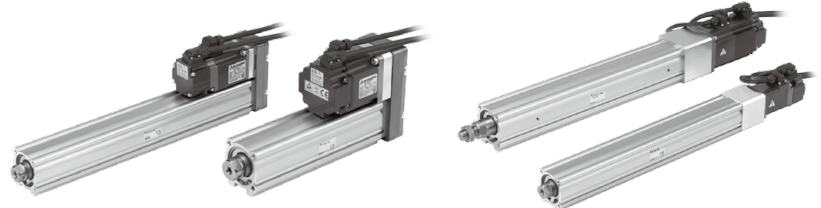
**Applicable auto switches**
D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900
D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

SMC

Motor mounting position:
**Top/Parallel**

Motor mounting position:
**In-line**

## ❿ Cable type*1 *2

| Nil | Without cable |
|-----|---------------|
| S | Standard cable |
| R | Robotic cable (Flexible cable) |

*1 The motor and encoder cables are included.
(The lock cable is also included when the motor with lock option is selected.)
*2 Standard cable entry direction is
· Top/Parallel: (A) Axis side
· In-line: (B) Counter axis side

## ⓫ Cable length*1 [m]

| Nil | Without cable |
|-----|---------------|
| 2 | 2 |
| 5 | 5 |
| A | 10 |

*1 The length of the encoder, motor, and lock cables are the same.

## ⓬ Driver type*1

| | Compatible driver | Power supply voltage [V] | UL-compliant |
|-----|---------------|------|------|
| **Nil** | Without driver | — | — |
| **A1** | LECSA1-S□ | 100 to 120 | — |
| **A2** | LECSA2-S□ | 200 to 230 | — |
| **B1** | LECSB1-S□ | 100 to 120 | — |
| **B2** | LECSB2-S□ | 200 to 230 | — |
| | LECSB2-T□ | 200 to 240 | — |
| **C1** | LECSC1-S□ | 100 to 120 | — |
| **C2** | LECSC2-S□ | 200 to 230 | — |
| | LECSC2-T□ | | — |
| **S1** | LECSS1-S□ | 100 to 120 | — |
| **S2** | LECSS2-S□ | 200 to 230 | — |
| | LECSS2-T□ | 200 to 240 | ● |

*1 When a driver type is selected, a cable is included.
Select the cable type and cable length.
Example)
S2S2: Standard cable (2 m) + Driver (LECSS2)
S2 : Standard cable (2 m)
Nil : Without cable and driver

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

## ⓭ I/O cable length [m]*1

| Nil | Without cable |
|-----|---------------|
| H | Without cable (Connector only) |
| 1 | 1.5 |

*1 When "Without driver" is selected for driver type, only "Nil: Without cable" can be selected. Refer to page 271 if I/O cable is required.

## Compatible Driver

| Driver type | Pulse input type/ Positioning type | Pulse input type | CC-Link direct input type | SSCNET III type | Pulse input type | CC-Link direct input type | SSCNET III/H type |
|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |
| **Series** | **LECSA** | **LECSB** | **LECSC** | **LECSS** | **LECSB-T** | **LECSC-T** | **LECSS-T** |
| Number of point tables | Up to 7 | — | Up to 255 (2 stations occupied) | — | Up to 255 | Up to 255 (2 stations occupied) | — |
| Pulse input | ○ | ○ | — | — | ○ | — | — |
| Applicable network | — | — | CC-Link | SSCNET III | — | CC-Link | SSCNET III/H |
| Control encoder | Incremental 17-bit encoder | Absolute 18-bit encoder | Absolute 18-bit encoder | Absolute 18-bit encoder | Absolute 22-bit encoder | Absolute 18-bit encoder | Absolute 22-bit encoder |
| Communication function | USB communication | USB communication, RS422 communication | USB communication, RS422 communication | USB communication | USB communication, RS422 communication | USB communication | USB communication |
| Power supply voltage [V] | 100 to 120 VAC (50/60 Hz), 200 to 230 VAC (50/60 Hz) | | | | 200 to 240 VAC (50/60 Hz) | 200 to 230 VAC (50/60 Hz) | 200 to 240 VAC (50/60 Hz) |
| Reference page | **Click here** | | | | | | |

∗ Copper and zinc materials are used for the motors, cables, controllers/drivers.

Model Selection

Step Motor (Servo/24 VDC)/Servo Motor (24 VDC) — LEY

LEYG

AC Servo Motor — LEY

LEYG

Environment — LEY-X5

25A-LEY

LECA6 LECP6

LEC-G

Step Motor (Servo/24 VDC)/Servo Motor (24 VDC) — LECP1

LECPA

LECPMJ

JXC□

AC Servo Motor — LECS□

LECY□

Specific Product Precautions

# Electric Actuator/ Rod Type
## Secondary Battery Compatible
# *25A-LEY Series*  LEY25, 32  Size 25, 32

CE  RoHS

## How to Order

25A-LEY [H] [25] [ ] [V6] [B] − [100] [ ] [ ] [ ] − [S] [2] [M2] [ ]

Series compatible with secondary batteries

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽ ❾ ❿ ⓫ ⓬ ⓭

**❶ Accuracy**

| Nil | Basic type |
|-----|------------|
| H | High-precision type |

**❷ Size**

| 25 |
|----|
| 32 |

**❸ Motor mounting position**

| Nil | Top mounting |
|-----|--------------|
| R | Right side parallel |
| L | Left side parallel |
| D | In-line |

**❹ Motor type**

| Symbol | Type | Output [W] | Size | Compatible driver |
|--------|------|-----------|------|-------------------|
| V6*1 | AC servo motor (Absolute encoder) | 100 | 25 | LECYM2-V5 LECYU2-V5 |
| V7 | | 200 | 32 | LECYM2-V7 LECYU2-V7 |

*1 For motor type V6, the compatible driver part number suffix is V5.

**❺ Lead [mm]**

| Symbol | 25A-LEY25 | 25A-LEY32*1 |
|--------|-----------|-------------|
| A | 12 | 16 (20) |
| B | 6 | 8 (10) |
| C | 3 | 4 (5) |

*1 The values shown in ( ) are the leads for the size 32 top mounting, right/left side parallel types. (Equivalent leads which include the pulley ratio [1.25:1])
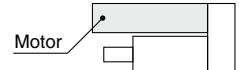
**❻ Stroke [mm]**

| 30 | 30 |
|----|----|
| to | to |
| 500 | 500 |

* For details, refer to the applicable stroke table below.

**❼ Motor option**

| Nil | Without option |
|-----|----------------|
| B | With lock*1 |

*1 When "With lock" is selected for the top mounting and right/left side parallel types, the motor body will stick out from the end of the body for size 25 with strokes of 30 mm or less. Check for interference with workpieces before selecting a model.

Motor

**❽ Rod end thread**

| Nil | Rod end female thread |
|-----|-----------------------|
| M | Rod end male thread (1 rod end nut is included.) |

**❾ Mounting***1

| Symbol | Type | Motor mounting position | |
|--------|------|----------|---------|
| | | Top/Parallel | In-line |
| Nil | Ends tapped/ Body bottom tapped*2 | ● | ● |
| L | Foot | ● | — |
| F | Rod flange*2 | ●*4 | ● |
| G | Head flange*2 | ●*5 | — |
| D | Double clevis*3 | ● | — |

*1 The mounting bracket is shipped together with the product but does not come assembled.
*2 For the horizontal cantilever mounting of the rod flange, head flange, or ends tapped types, use the actuator within the following stroke range.
· LEY25: 200 mm or less  · LEY32: 100 mm or less
*3 For the mounting of the double clevis type, use the actuator within the following stroke range.
· LEY25: 200 mm or less  · LEY32: 200 mm or less
*4 The rod flange type is not available for the LEY25 with a 30 mm stroke and motor option "With lock."
*5 The head flange type is not available for the LEY32.

**Mounting Bracket Part Nos. for the 25A- Series**

| Applicable size | Foot*1 | Flange | Double clevis |
|-----------------|--------|--------|---------------|
| 25 | 25-LEY-L025 | 25-LEY-F025 | 25-LEY-D025 |
| 32 | 25-LEY-L032 | 25-LEY-F032 | 25-LEY-D032 |
| Surface treatment | RAYDENT® | RAYDENT® | Coating (Size 16: Electroless nickel plating) |

*1 When ordering foot brackets, order 2 pieces per actuator.
* Parts belonging to each bracket are as follows.
Foot, Flange: Body mounting bolt, Double clevis: Clevis pin, Type C retaining ring for axis, Body mounting bolt

**Solid state auto switches should be ordered separately. For details on auto switches, refer to the Web Catalog.**

Applicable auto switches
D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900
D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

**Applicable Stroke Table**

●: Standard

| Model | Stroke [mm] | 30 | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | Manufacturable stroke range [mm] |
|-------|-------------|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------------------------------------|
| 25A-LEY25 | | ● | ● | ● | ● | ● | ● | ● | ● | ● | — | — | 15 to 400 |
| 25A-LEY32 | | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | 20 to 500 |

* Please consult with SMC for non-standard strokes as they are produced as special orders.

SMC

**Motor mounting position:**
**Top/Parallel**

**Motor mounting position:**
**In-line**

### ⑩ Cable type*¹ *²

| Nil | Without cable |
|-----|---------------|
| S | Standard cable |
| R | Robotic cable (Flexible cable) |

*1 The motor and encoder cables are included. (The lock cable is also included when the motor with lock option is selected.)
*2 Standard cable entry direction is
· Top/Parallel: (A) Axis side
· In-line: (B) Counter axis side

### ⑬ I/O cable length [m]*¹

| Nil | Without cable |
|-----|---------------|
| H | Without cable (Connector only) |
| 1 | 1.5 |

*1 When "Without driver" is selected for driver type, only "Nil: Without cable" can be selected. Refer to page 284 if I/O cable is required.

### ⑪ Cable length [m]*¹

| Nil | Without cable |
|-----|---------------|
| 3 | 3 |
| 5 | 5 |
| A | 10 |
| C | 20 |

*1 The length of the motor and encoder cables are the same. (For with lock)

### ⑫ Driver type

| | Compatible driver | Power supply voltage [V] |
|---|---|---|
| Nil | Without driver | — |
| M2 | LECYM2-V□ | 200 to 230 |
| U2 | LECYU2-V□ | 200 to 230 |

* When a driver type is selected, a cable is included. Select the cable type and cable length.

* The 25A- series specifications and dimensions are the same as those of the standard model.

## Compatible Driver

| Driver type | MECHATROLINK-II type | MECHATROLINK-III type |
|---|---|---|
| |  |  |
| **Series** | **LECYM** | **LECYU** |
| **Applicable network** | MECHATROLINK-II | MECHATROLINK-III |
| **Control encoder** | Absolute 20-bit encoder | |
| **Communication device** | USB communication, RS-422 communication | |
| **Power supply voltage [V]** | 200 to 230 VAC (50/60 Hz) | |
| **Reference page** | 277 | |

* Copper and zinc materials are used for the motors, cables, controllers/drivers.