## Environment Secondary Batitry Compatiole

## －Copper（Cu）and zinc（Zn）free ${ }^{* 1}$

＊1 Excludes motors，cables，controllers／drivers
－Compatible with dew points as low as $-70^{\circ} \mathrm{C}$
Uses grease compatible with low dew points

## Slider Type

Ball Screw Drive／25A－LEFS


High Rigidity Slider Type
Ball Screw Drive／25A－LEJS
AC Servo Motor p．671， 672


Rod Type／25A－LEY


[^0]

# Electric Actuator/Slider Type Ball Screw Drive Semenam siavivideribe 25A-LEFS Series LeFsi6, 25, 32, 40 



| (1) Accuracy |  |  |
| :--- | :---: | :---: |
| Nil |  | Basic type |
| H |  |  | High-precision type 


| 2 Size |
| :---: |
| 16 |
| 25 |
| 32 |
| 40 |

Motor mounting position

| Nil | In-line |
| :---: | :---: |
| $\mathbf{R}$ | Right side parallel |
| $\mathbf{L}$ | Left side parallel |

Lead [mm]

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

(4) Motor type

| Symbol | Type | Applicable size |  |  |  | Compatible controllers/drivers |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | LEFS16 | LEFS25 | LEFS32 | LEFS40 |  |
| Nil | Step motor (Servo/24 VDC) | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ |  JXCE1 <br> JJC91 LECP1 <br> JXCP1  <br> JXCD1  <br> JXCL1  <br> JXCM1  <br> JXC51  <br> JXC61  |
| A | Servo motor (24 VDC) | $\bullet$ | $\bullet$ | - | - | LECA6 |


| 6 Stroke ${ }^{* 1}$ [mm] |  |  |
| :---: | :---: | :---: |
| Stroke | Note |  |
|  | Size | Applicable stroke |
| $\begin{aligned} & 50 \text { to } \\ & 500 \end{aligned}$ | 16 | $\begin{aligned} & 50,100,150,200,250,300,350,400,450, \\ & 500 \end{aligned}$ |
| $\begin{aligned} & 50 \text { to } \\ & 600 \\ & \hline \end{aligned}$ | 25 | $\begin{aligned} & \text { 50, 100, 150, 200, 250, 300, 350, 400, 450, } \\ & 500,550,600 \end{aligned}$ |
| $\begin{aligned} & 50 \text { to } \\ & 800 \end{aligned}$ | 32 | $\begin{aligned} & 50,100,150,200,250,300,350,400,450, \\ & 500,550,600,650,700,750,800 \\ & \hline \end{aligned}$ |
| $\begin{aligned} & 150 \text { to } \\ & 1000 \end{aligned}$ | 40 | $150,200,250,300,350,400,450,500,550$, $600,650,700,750,800,850,900,950$, 1000 |

Positioning pin hole

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

(9) Actuator cable type/length*4

| Standard cable [ m ] |  | Robotic cable |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Nil | None | R1 | 1.5 | RA | 10*3 |
| S1 | 1.5*6 | R3 | 3 | RB | 15*3 |
| S3 | 3*6 | R5 | 5 | RC | 20*3 |
| S5 | 5*6 | R8 | 8*3 |  |  |

## Support Guide/LEFG Series

The support guide was designed to support workpieces with significant overhang.

## p. 109



Communication plug connector I／O cable＊11
（Communication protocol／Input／Output）

| Symbol | Type | Applicable interface |
| :---: | :---: | :---: |
| Nil | Without accessory | - |
| $\mathbf{S}$ | Straight type communication plug connector | DeviceNet ${ }^{\text {TM }}$ |
| $\mathbf{T}$ | T－branch type communication plug connector | CC－Link Ver 1.10 |
| $\mathbf{1}$ | I／O cable $(1.5 \mathrm{~m})$ | Parallel input（NPN） |
| $\mathbf{3}$ | I／O cable $(3 \mathrm{~m})$ |  |
| $\mathbf{5}$ | I／O cable $(5 \mathrm{~m})$ |  |

## $L E C \square$ Series（For dealals raterto page eq7）



12 Controller／Driver mounting

| Nil | Screw mounting |
| :---: | :---: |
| $\mathbf{D}$ | DIN rail ${ }^{* 10}$ |

出華

10 Controller／Driver type＊5

| Nil | Without controller／driver |  |
| :---: | :---: | :---: |
| 6N | LECA6 | NPN |
| 6P | （Step data input type） | PNP |
| 1N | LECP1＊6 <br> （Programless type） | NPN |
| 1P |  | PNP |
| AN | $\begin{gathered} \text { LECPA } * 6 * 7 \\ \text { (Pulse input type) } \\ \hline \end{gathered}$ | NPN |
| AP |  | PNP |

$\mathbf{1 1}$ I／O cable length＊8

| $\mathbf{N i l}$ | Without cable <br> （Without communication plug connector） |
| :---: | :---: |
| $\mathbf{1}$ | 1.5 m |
| $\mathbf{3}$ | $3 \mathrm{~m}^{* 9}$ |
| $\mathbf{5}$ | $5 \mathrm{~m}^{* 9}$ |

11 I／O cable length＊8
＊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 166 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． Refer to pages 758 and 759 if only the actuator cable is required．
＊5 For details on controllers／drivers and compatible motors，refer to the compatible controllers／drivers on the next page．
＊6 Only available for the motor type＂Step motor＂
＊7 When pulse signals are open collector，order the current limiting resistor（LEC－PA－R－$\square$ ）on page 736 separately．
＊8 When＂Without controller／driver＂is selected for controller／driver types， I／O cable cannot be selected．Refer to page 713 （For LECA6），page 724 （For LECP1），or page 736 （For LECPA）if I／O cable is required．
＊9 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
＊10 The DIN rail is not included．It must be ordered separately．
＊11 Select＂Nil＂for anything other than DeviceNet ${ }^{\text {TM }}$ ，CC－Link，or parallel input．
Select＂Nil，＂＂S，＂or＂T＂for DeviceNet ${ }^{\text {TM }}$ or CC－Link． Select＂Nil，＂＂1，＂＂3，＂or＂ 5 ＂for parallel input．

## 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＂ $25 \mathrm{~A}-$－＂）．This number should match that of the controller／driver．
（2）Check that the Paralle I／O configuration matches （NPN or PNP）．

[^1] it via our website：https：／／www．smcworld．com


## ［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．

## $\triangle$ 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 713 for the noise filter set．Refer to the LECA series Operation Manual for installation．

## 25A-LEFS Series

Step Motor (Servo/24 VDC)

## Compatible Controllers/Drivers

| Type | EtherCAT ${ }^{\circledR}$ direct input type | EtherNet/IPTM direct input type | PROFINET direct input type | DeviceNet ${ }^{\text {TM }}$ direct input type | IO-Link direct input type | CC-Link direct input type |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Series | JXCE1 | JXC91 | JXCP1 | JXCD1 | JXCL1 | JXCM1 |
| Features | EtherCAT ${ }^{\circledR}$ direct input | EtherNet//PTM direct input | PROFINET direct input | DeviceNet ${ }^{\text {TM }}$ direct input | IO-Link direct input | CC-Link direct input |
| Compatible motor | Step motor (Servo/24 VDC) |  |  |  |  |  |
| Max. number of step data | 64 points |  |  |  |  |  |
| Power supply voltage | 24 VDC |  |  |  |  |  |
| Reference page | 741 |  |  |  |  |  |


| Type | Step data input type | Step data input type | Programless type | Pulse input type |
| :---: | :---: | :---: | :---: | :---: |
| Series | $\begin{aligned} & \hline \text { JXC51 } \\ & \text { JXC61 } \end{aligned}$ | LECA6 | LECP1 | LECPA |
| Features | Parallel I/O | Value (Step data) input Standard controller | 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 | 706-1 | 707 | 719 | 731 |

# Electric Actuator／Slider Type Ball Screw Drive Semenay siavicomeribe 

## 25A－LEFS Series LEFS25，32，40

Refer to page 39 for model selection．

LECY $\square$ Series $>$ p． 669

How to Order

## 先

＊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

| 10 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． |  |
| （12）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 797 if I／O cable is required．（Options are shown on page 797．）
＊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 is LECS $\square 2-$ T5．

## Applicable Stroke Table

|  | 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 | － | $\bigcirc$ | $\bigcirc$ | － | － | － | － | － | － | － | － | $\bigcirc$ | － | － | － | － | － | － | － | － | 50 to 600 |
| 25A－LEFS32 | － | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | － | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | － | － | － | － | － | － | － | － | 50 to 800 |
| 25A－LEFS40 | － | － | $\bigcirc$ | － | $\bigcirc$ | － | － | － | － | $\bigcirc$ | － | $\bigcirc$ | － | － | － | － | － | － | － | － | 150 to 1000 |

＊Please consult with SMC for non－standard strokes as they are produced as special orders．
Compatible Drivers＊${ }^{*}$

| 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 |  | Network card type |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Series | LECSA | LECSB | LECSC | LECSS | LECSB－T | LECSC－T | LECSS－T | LECSN－T |
| Number of point tables＊2 | Up to 7 | － | Up to 255 （2staions occupied） | － | Up to 255 | Up to 255 （2staitions occupied） | － | Up to 255 |
| Pulse input | $\bigcirc$ | $\bigcirc$ | － | － | $\bigcirc$ | － | － | － |
| Applicable network | － | － | CC－Link | SSCNETIII | － | CC－Link | SSCNET III／H | PROFINET EtherCAT ${ }^{\text {® }}$ EtherNet／IPTM |
| 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 | Absolute 22－bit encoder |
| Communication function | USB communication | USB communication， | RS422 communication | USB communication | USB communication， | RS422 communication | USB communication | USB communication |
| Power supply voltage［V］ | 100 to 120 | $\operatorname{VAC}(50 / 60 \mathrm{~Hz})$ | 200 to 230 VAC | $(50 / 60 \mathrm{~Hz}$ ） | 200 to $240 \mathrm{VAC}(50 / 60 \mathrm{~Hz}$ ） | 200 to $230 \mathrm{VAC}(50160 \mathrm{~Hz}$ ） | 200 to $240 \mathrm{VAC}(50160 \mathrm{~Hz})$ | 200 to $240 \mathrm{VAC}(50160 \mathrm{~Hz})$ |
| Reference page | 777 |  |  |  |  |  |  |  |


＊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．

# Electric Actuator/Slider Type 

## Ball Screw Drive semonavesialeyconariive

## 25A-LEFS Series LeFs25, 32, 40

Refer to page 47 for model selection.

## How to Order



| 3 Motor mounting |
| :--- |
| Mosition <br> pos <br> Nil <br> In-line <br> R Right side parallel |
| L |



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

*1 Refer to the body mounting example on page 166 for the mounting method.


## 10 Cable length*1 [m]

| Nil | Without cable |
| :---: | :---: |
| $* \mathbf{*} 1$The length of <br> the encoder, <br> motor, and lock <br> cables are the |  |
| $\mathbf{5}$ | 3 |
| same. |  |

Applicable Stroke Table

| [mm] <br> Model | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 | 950 | 1000 | Manviacturable stroke range [mm] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 25A-LEFS25 | - | - | - | - | - | - | $\bigcirc$ | - | - | - | - | $\bigcirc$ | - | - | - | - | - | - | - | - | 50 to 600 |
| 25A-LEFS32 | - | - | - | $\bullet$ | - | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | - | - | $\bigcirc$ | $\bigcirc$ | - | $\bigcirc$ | - | $\bigcirc$ | - | - | - | - | 50 to 800 |
| 25A-LEFS40 | - | - | $\bigcirc$ | - | - | - | $\bigcirc$ | - | - | - | - | - | $\bigcirc$ | - | $\bigcirc$ | - | - | $\bigcirc$ | - | - | 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 Drivers

| Driver type | HMECHATROLINK-II type | IA 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 ( $50 / 60 \mathrm{~Hz}$ ) |  |
| Reference page | 801 |  |

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


# Electric Actuator／High Rigidity Slider Type  

## 25A－LEJS Series LEJS40， 63

## Refer to page 175 for model selection．

## LECY $\square$ Series $>$ p． 672

 How to Order


| $\mathbf{N i l}$ | Basic type |
| :---: | :---: |
| $\mathbf{H}$ | High－precision type |


（5）Stroke［mm］＊3 200 to 1500
＊3 Refer to the applicable stroke table for details．


3 Motor type

| Symbol | Type | Output ［W］ | Actuator size | Compatible＊3 drivers | $\left\|\begin{array}{c} \text { UL- } \\ \text { compliant } \end{array}\right\|$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| S2＊1 | AC servo motor （Incremental encoder） | 100 | 40 | LECSA $\square$－S1 | $\bigcirc$ |
| S3 | AC servo motor （Incremental encoder） | 200 | 63 | LECSA $\square$－S3 | $\bigcirc$ |
| S6＊1 | AC servo motor （Absolute encoder） | 100 | 40 | $\begin{aligned} & \text { LECSB } \square-S 5 \\ & \text { LECSC口-S5 } \\ & \text { LECSS } \square \text {-S5 } \end{aligned}$ | － |
| S7 | AC servo motor （Absolute encoder） | 200 | 63 | LECSB $\square-$－S7 LECSC - －S7 LECSS $\square$－S7 | － |
| T6＊2 | AC servo motor （Absolute encoder） | 100 | 40 | LECSB2－T5 <br> LECSC2－T5 <br> LECSN2－T5－ | － |
|  |  |  |  | LECSS2－T5 | $\bigcirc$ |
| T7 |  | 200 | 63 | LECSB2－T7 <br> LECSC2－T7 <br> LECSN2－T7－$\square$ | － |
|  |  |  |  | LECSS2－T7 | $\bigcirc$ |

＊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 is LECS $\square 2-T 5$ ．
 Cable type ${ }^{* 5, * 6, * 7}$


| Nil | Without cable |
| :---: | :---: |
| $\mathbf{S}$ | Standard cable |
| $\mathbf{R}$ | 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．＂

| 8 | Cable length［m］＊5，＊8 |
| :---: | :---: |
| Nil | Without cable |
| $\mathbf{2}$ | 2 |
| $\mathbf{5}$ | 5 |
| A | 10 |

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

Applicable Stroke Table＊4

| Stroke | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1200 | 1500 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model |  |  |  |  |  |  |  |  |  |  |  |
| 25A－LEJS40 | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ | - |
| 25A－LEJS63 | - | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ |

＊4 Please consult with SMC for non－standard strokes as they are produced as special orders．
（4）Lead［mm］
Symbol 25 A－LEJS40 $25 A-L E J S 63$

| $\mathbf{H}$ | 24 | 30 |
| :---: | :---: | :---: |
| $\mathbf{A}$ | 16 | 20 |
| $\mathbf{B}$ | 8 | 10 |

Driver type＊5

|  | Compatible drivers | Power supply voltage［V］ | UL－compliant |
| :---: | :---: | :---: | :---: |
| Nil | Without driver |  |  |
| A1 | LECSA1－S［ | 100 to 120 | － |
| A2 | LECSA2－S $\square$ | 200 to 230 | － |
| B1 | LECSB1－SD | 100 to 120 |  |
| B2 | LECSB2－SD | 200 to 230 | － |
|  | LECSB2－T■ | 200 to 240 | $\bullet$ |
| C1 | LECSC1－S $\square$ | 100 to 120 |  |
| C2 | LECSC2－S | 200 to 230 | － |
| S1 | LECSS1－S $\square$ | 100 to 120 |  |
|  | LECSS2－SD | 200 to 230 |  |
| S2 | LECSS2－Tロ | 200 to 240 | $\bullet$ |
| N2 | LECSN2－T】 | 200 to 240 | － |
| 92 | LECSN2－TD－9 | 200 to 240 |  |
| E2 | LECSN2－TD－E | 200 to 240 | － |
| P2 | LECSN2－TD－P | 200 to 240 |  |

＊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

## 10 I／O cable length［m］＊9

| Nil | Without cable |
| :---: | :---: |
| $\mathbf{H}$ | Without cable（Connector only） |
| $\mathbf{1}$ | 1.5 |

＊9 When＂Without driver＂is selected for driver type， only＂Nil：Without cable＂can be selected． Refer to page 797 if I／O cable is required．

For auto switches，refer to page 681.

## Compatible Drivers＊＊

| 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 |  | Network card type |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Series | LECSA | LECSB | LECSC | LECSS | LECSB－T | LECSC－T | LECSS－T | LECSN－T |
| Number of point tables＊11 | Up to 7 | － | Up to 255 | － | Up to 255 | Up to 255 （2stations occupied） | － | Up to 255 |
| Pulse input | $\bigcirc$ | $\bigcirc$ | － | － | $\bigcirc$ | － | － | － |
| Applicable network | － | － | CC－Link | SSCNETIII | － | CC－Link | SSCNET III／H | PROFINET EtherCAT ${ }^{\circledR}$ EtherNet／IPTM |
| 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 | Absolute 22－bit encoder |
| Communication function | USB communication | USB communication， | RS422 communication | USB communication | USB communication， | RS422 communication | USB communication | USB communication |
| Power supply voltage［V］ | 100 to 120 | VAC（ $50 / 60 \mathrm{~Hz}$ ）， | 200 to 230 VAC | （ $50 / 60 \mathrm{~Hz}$ ） | 200 to $240 \mathrm{VAC}(50160 \mathrm{~Hz}$ ） | 200 to $230 \mathrm{VAC}(50160 \mathrm{~Hz}$ ） | 200 to $240 \mathrm{VAC}(50160 \mathrm{~Hz}$ ） | 200 to $240 \mathrm{VAC}(50160 \mathrm{~Hz}$ ） |
| Reference page | 777 |  |  |  |  |  |  |  |

＊10 Copper and zinc materials are used for the motors，cables，controllers／drivers．＊11 The LECSN－T only supports PROFINET and EtherCAT ${ }^{\circledR}$ ．

# Electric Actuator/High Rigidity Slider Type Ball Screw Drive semonay bicivocimaibe 

 25A-LEJS Series LEJS40, 63
## Refer to page 186 for model selection.

LECS $\square$ Series $\downarrow$ p. 671

## How to Order


(3) Motor type *1

7
Cable type ${ }^{* 5, * 6, * 7}$

| Nil | Without cable |
| :---: | :---: |
| $\mathbf{S}$ | Standard cable |
| $\mathbf{R}$ | 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."

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

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

| 8 Cable length [m] $* 5, * 8$ |  |
| :---: | :---: |
| Nil | Without cable |
| $\mathbf{3}$ | 3 |
| $\mathbf{5}$ | 5 |
| $\mathbf{A}$ | 10 |
| $\mathbf{C}$ | 20 |

*8 The length of the motor, encoder, and lock cables are the same.
(4) Lead [mm]

| Symbol | 25A-LEJS40 | 25A-LEJS63 |
| :---: | :---: | :---: |
| $\mathbf{H}$ | 24 | 30 |
| $\mathbf{A}$ | 16 | 20 |
| $\mathbf{B}$ | 8 | 10 |

(5) Stroke [mm]*3 | to | $* 3$ |
| :---: | :---: |
| to | $\begin{array}{l}\text { Refer to the } \\ \text { applicable stroke }\end{array}$ |
| 1500 | $\begin{array}{c}\text { table for details. }\end{array}$ |



| 9)Driver type $* 5$     <br>    Compatible drivers Power supply voltage [V] <br> Nil     <br> Without driver    $\|-$ |
| :--- |
| M2 |
| U2 |

*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
When "Without driver" is selected for driver type, only "Nil: Without cable" can be selected. Refer to page 808 if I/O cable is required.

| $\mathbf{N i l}$ | Without cable |
| :---: | :---: |
| $\mathbf{H}$ | Without cable (Connector only) |
| $\mathbf{1}$ | 1.5 |

Applicable Stroke Table*4

| Applicable | troke | Table |  |  |  |  |  |  |  | - | andard |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1200 | 1500 |
| 25A-LEJS40 | $\bigcirc$ | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ | $\bigcirc$ | $\bullet$ | $\bullet$ | - |
| 25A-LEJS63 | - | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ | $\bigcirc$ | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ | $\bigcirc$ |

*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 on auto switches, refer to page 681.

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.


## Compatible Drivers

| Driver type | IIMECHATROLINK-II type | IIMECHATROLINK-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 ( $50 / 60 \mathrm{~Hz}$ ) |  |
| Reference page | 801 |  |

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


# Electric Actuator  25A-LEY Series LEY16, 25,32,40 

Refer to page 299 for model selection.
Dust-tight/Water-jet-proof>p. 611

## How to Order

Motor mounting position:
Top/Parallel


LEC $\square$ Series


For details on controllers, refer to page 674.
Motor mounting position

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

## (3) Motor type

| Symbol | Type | Applicable size |  |  | Compatible controllers/ drivers |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | LEY16 | LEY25 | LEY32/40 |  |  |  |
| Nil | Step motor (Servo/24 VDC) | - | - | - | JXCE1 <br> JXC91 <br> JXCP1 <br> JXCD1 <br> JXCL1 | $\begin{aligned} & \text { JXCM1 } \\ & \text { JXC51 } \\ & \text { JXC61 } \end{aligned}$ | LECP1 <br> LECPA |
| A | Servo motor (24 VDC) | $\bigcirc$ | - | - |  | LECA6 |  |

4 Lead [mm]

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

(5) Stroke [mm]

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



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


## Rod end thread

| Nil | Rod end female thread |
| :---: | :---: |
| $\mathbf{M}$ | Rod end male thread <br> (1 rod end nut is included.) |

## 8 Mounting* ${ }^{*}$

| Symbol | Type | Motor mounting position |  |
| :---: | :---: | :---: | :---: |
|  |  | In-line |  |
| $\mathbf{N i l}$ | Ends tapped/Body <br> bottom tapped*6 | $\bullet$ | $\bullet$ |
| $\mathbf{L}$ | Foot | $\bullet$ | - |
| $\mathbf{F}$ | Rod flange*6 | $\bullet^{* 8}$ | $\bullet$ |
| $\mathbf{G}$ | Head flange*6 | $\bullet^{* 9}$ | - |
| $\mathbf{D}$ | Double clevis*7 | $\bullet$ | - |

Actuator cable type/length*11
Standard cable [m] Robotic cable

| Standard cable [m] |  | Robotic cable |  |  | [m] |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Nil | None | R1 | 1.5 | RA | 10*10 |
| S1 | $1.5 * 12$ | R3 | 3 | RB | $15^{* 10}$ |
| S3 | 3*12 | R5 | 5 | RC | 20*10 |
| S5 | 5*12 | R8 | 8*10 |  |  |


| Mounting Bracket Part Nos. for the 25A- Series ${ }^{* 4}$ |
| :--- |
| Applicable size Foot*3 Flange Double clevis <br> $\mathbf{1 6}$ $25-$-LEY-L016 $25-$ LEY-F016 $25-$ LEY-D016 <br> $\mathbf{2 5}$ $25-$ LEY-L025 $25-$ LEY-F025 $25-$ LEY-D025 <br> $\mathbf{3 2 , 4 0}$ $25-$ LEY-L032 $25-$ LEY-F032 $25-$ LEY-D032 <br> Surface <br> treatment RAYDENT ${ }^{\circledR}$ RAYDENT ${ }^{\circledR}$ (Size 16: Electroless nickel plating) |

## Solid state auto switches should be ordered separately. For details on auto switches, refer to page 681.

## 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

| Model | 30 | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | Manufacturable stroke range |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 25A-LEY16 | - | $\bigcirc$ | $\bigcirc$ | - | - | - | - | - | - | - | - | 10 to 300 |
| 25A-LEY25 | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | - | - | 15 to 400 |
| 25A-LEY32/40 | $\bigcirc$ | $\bigcirc$ | - | $\bigcirc$ | $\bigcirc$ | - | $\bigcirc$ | - | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | 20 to 500 |


$L E C \square$ Series（For dealisis reterto page 8 F5）


| 0 Controller／Driver type＊12 |  |  |
| :---: | :---: | :---: |
| Nil | Without controller／driver |  |
| 6N | LECA6 | NPN |
| 6P | （Step data input type） | PNP |
| 1N | LECP1＊13 <br> （Programless type） | NPN |
| 1P |  | PNP |
| AN | LECPA＊13＊14 <br> （Pulse input type） | NPN |
| AP |  | PNP |

11 I／O cable length＊15

| Nil | Without cable <br> （Without communication plug connector） |
| :---: | :---: |
| $\mathbf{1}$ | 1.5 m |
| $\mathbf{3}$ | $3 \mathrm{~m}^{* 16}$ |
| $\mathbf{5}$ | $5 \mathrm{~m}^{* 16}$ |

12 Controller／Driver mounting | Nil | Screw mounting |
| :---: | :---: |
| D | DIN rail＊17 |

|  |
| :---: |
| 1 |
| 岂 |
| $\sum_{\text {¢ }}$ |

＊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）

## $\triangle$ 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（24VDC）specification，EMC compliance was tested by installing a noise filter set（LEC－NFA）．Refer to page 713 for the noise filter set．Refer to the LECA series Operation Manual for installation．

## ［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．
＊11 The standard cable should only be used on fixed parts．
For use on moving parts，select the robotic cable．
Refer to pages 758 and 759 if only the actuator cable is required．
＊12 For details on controllers／drivers and compatible motors，refer to the compatible controllers／drivers on the next page．
＊13 Only available for the motor type＂Step motor＂
＊14 When pulse signals are open collector，order the current limiting resistor（LEC－PA－R－$\square$ ）on page 736 separately．
＊15 When＂Without controller／driver＂is selected for controller／driver types， I／O cable cannot be selected．Refer to page 713 （For LECA6），page 724 （For LECP1），or page 736 （For LECPA）if I／O cable is required．
＊16 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
＊17 The DIN rail is not included．It must be ordered separately．
＊18 Select＂Nil＂for anything other than DeviceNet™，CC－Link，or parallel input．
Select＂Nil，＂＂S，＂or＂T＂for DeviceNetTM or CC－Link．
Select＂Nil，＂＂1，＂＂3，＂or＂ 5 ＂for parallel input．

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＂ 25 A－＂）． This number should match that of the controller／driver．
（2）Check that the Parallel I／O configuration matches （NPN or PNP）．

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

## 25A-LEY Series

## Compatible Controllers/Drivers

| Type | EtherCAT® ${ }^{\circledR}$ direct input type | EtherNet/IPTM direct input type | PROFINET direct input type | DeviceNet ${ }^{\text {TM }}$ direct input type | IO-Link direct input type | CC-Link direct input type |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Series | JXCE1 | JXC91 | JXCP1 | JXCD1 | JXCL1 | JXCM1 |
| Features | EtherCAT® ${ }^{\circledR}$ direct input | EtherNet/IPTM direct input | PROFINET direct input | DeviceNet™ direct input | IO-Link direct input | CC-Link direct input |
| Compatible motor | Step motor (Servo/24 VDC) |  |  |  |  |  |
| Max. number of step data | 64 points |  |  |  |  |  |
| Power supply voltage | 24 VDC |  |  |  |  |  |
| Reference page | 741 |  |  |  |  |  |


| Type | Step data input type | Step data input type | Programless type | Pulse input type |
| :---: | :---: | :---: | :---: | :---: |
| Series | $\begin{aligned} & \hline \text { JXC51 } \\ & \text { JXC61 } \end{aligned}$ | LECA6 | LECP1 | LECPA |
| Features | Parallel I/O | Value (Step data) input Standard controller | 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 | 706-1 | 707 | 719 | 731 |

# Electric Actuator <br>  <br> * See tables (4 

## 25A-LEY Series

LEY25, 32
Size 25,32
RoHS

## How to Order


(1) Accuracy

| Nil | Basic type |
| :---: | :---: |
| $\mathbf{H}$ | High-precision type |



Lead [mm]

| Symbol | LEY25 | LEY32*1 |
| :---: | :---: | :---: |
| $\mathbf{A}$ | 12 | $16(20)$ |
| $\mathbf{B}$ | 6 | $8(10)$ |
| $\mathbf{C}$ | 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])

## 6 Stroke [mm]

| $\mathbf{3 0}$ | 30 |
| :---: | :---: |
| to | to |
| $\mathbf{5 0 0}$ | 500 |

For details, refer to the applicable stroke table below.

## 8 Rod end thread

| Nil | Rod end female thread |
| :---: | :---: |
| $\mathbf{M}$ | Rod end male thread <br> (1 rod end nut is included.) |

Mounting Bracket Part Nos. for the 25A- Series

| Applicable size | Foot*1 $^{* 1}$ | Flange | Double clevis |
| :---: | :---: | :---: | :---: |
| $\mathbf{2 5}$ | $25-$ LEY-L025 | $25-$ LEY-F025 | $25-$ LEY-D025 |
| $\mathbf{3 2}$ | $25-$ LEY-L032 | $25-$ LEY-F032 | $25-$ LEY-D032 |
| Surface <br> treatment | RAYDENT ${ }^{\circledR}$ | RAYDENT® | Coating <br> (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

| Applicable Stroke Table |  |  |  |  |  |  |  |  |  |  |  | O: Standard |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 30 | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | Manufacturable stroke range [mm] |
| 25A-LEY25 | $\bigcirc$ | - | $\bigcirc$ | $\bigcirc$ | - | - | - | - | - | - | - | 15 to 400 |
| 25A-LEY32 | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | - | $\bigcirc$ | - | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | - | 20 to 500 |

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

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4 Motor type*1

| Symbol | Type | Output [W] | Actuator size | Compatible drivers*3 | $\begin{array}{c\|} \hline \text { UL- } \\ \text { compliant } \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| S2*1 | AC servo motor (Incremental encoder) | 100 | 25 | LECSAD-S1 | $\bullet$ |
| S3 |  | 200 | 32 | LECSAD-S3 | $\bullet$ |
| S6*1 | AC servo motor (Absolute encoder) | 100 | 25 | LECSB $\square$-S5 LECSCD-S5 LECSSD-S5 | - |
| S7 |  | 200 | 32 | LECSB $\square$-S7 | - |
|  |  |  |  | LECSCD-S7 |  |
|  |  |  |  | LECSS $\square$-S7 |  |
| T6*2 | AC servo motor (Absolute encoder) | 100 | 25 | LECSB2-T5 <br> LECSC2-T5 <br> LECSN2-T5- $\square$ | - |
|  |  |  |  | LECSS2-T5 | $\bullet$ |
| T7 |  | 200 | 32 | $\begin{aligned} & \text { LECSB2-T7 } \\ & \text { LECSC2-T7 } \\ & \text { LECSN2-T7- } \end{aligned}$ | - |
|  |  |  |  | LECSS2-T7 | - |

*1 For motor type S 2 and S 6 , the compatible driver part number suffixes are S 1 and S 5 respectively.
*2 For motor type T6, the compatible driver part number is LECS $\square 2-\mathrm{T} 5$.
*3 For details on the driver, refer to page 777.

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.


| Symbol | Type | Motor mounting position |  |
| :---: | :---: | :---: | :---: |
|  |  | Top/Parallel | In-line |
| Nil | Ends tapped/ Body bottom tapped ${ }^{* 2}$ | $\bigcirc$ | $\bigcirc$ |
| L | Foot | $\bigcirc$ | - |
| F | Rod flange*2 | * * | $\bigcirc$ |
| 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.

## Solid state auto switches should be ordered separately.

 For details on auto switches, refer to page 681.
## 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

# Electric Actuator Rod Type <br> 25A-LEY Series <br> AC Servo Motor <br> Size 25, 32 <br> Secondary Battery Compatible 



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 Io cable length $[\mathrm{m}]^{*}$

| Nil | Without cable |
| :---: | :---: |
| $\mathbf{H}$ | Without cable (Connector only) |
| $\mathbf{1}$ | 1.5 |

*1 When "Without driver" is selected for driver type,
only "Nil: Without cable" can be selected.
Refer to page 797 if I/O cable is required.
11 Cable length ${ }^{* 1}[\mathrm{~m}]$

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

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

Driver type*1

|  | Compatible drivers | Power supply voltage [V] | UL-compliant |
| :---: | :--- | :---: | :---: |
| Nil | Without driver | - | - |
| A1 | LECSA1-S $\square$ | 100 to 120 | - |
| A2 | LECSA2-S $\square$ | 200 to 230 | - |
| B1 | LECSB1-S $\square$ | 100 to 120 | - |
| B2 | LECSB2-S $\square$ | 200 to 230 | - |
|  | LECSB2-T $\square$ | 200 to 240 | - |
| C1 | LECSC1-S $\square$ | 100 to 120 | - |
| $\mathbf{C}$ C2 | LECSC2-S $\square$ | 200 to 230 | - |
|  | LECSC2-T $\square$ |  | - |
| S1 | LECSS1-S $\square$ | 100 to 120 | - |
| S2 | LECSS2-S $\square$ | 200 to 230 | - |
|  | LECSS2-T $\square$ | 200 to 240 | - |
| N2 | LECSN2-T $\square$ | 200 to 240 | - |
| 92 | LECSN2-T $\square-9$ | 200 to 240 | - |
| E2 | LECSN2-T $\square-E$ | 200 to 240 | - |
| P2 | LECSN2-T $\square-P$ | 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.
Compatible Drivers*1

| 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 | SSCNETII/H type | Network card type |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Series | LECSA | LECSB | LECSC | LECSS | LECSB-T | LECSC-T | LECSS-T | LECSN-T |
| Number of point tables*2 | Up to 7 | - | Up to 255 (2stations occupied) | - | Up to 255 | Up to 255 (2stations occupied) | - | Up to 255 |
| Pulse input | $\bigcirc$ | $\bigcirc$ | - | - | $\bigcirc$ | - | - | - |
| Applicable network | - | - | CC-Link | SSCNET III | - | CC-Link | SSCNETIII/H | PROFINET EtherCAT ${ }^{\circledR}$ EtherNet/IPTM |
| 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 | Absolute 22-bit encoder |
| Communication function | USB communication | USB communication, A | RS422 communication | USB communication | USB communication, R | RS422 communication | USB communication | USB communication |
| Power supply voltage [V] | 100 to 120 V | VAC (50/60 Hz), | 200 to 230 VAC | ( $50 / 60 \mathrm{~Hz}$ ) | $\begin{aligned} & 200 \text { to } 240 \\ & \text { VAC } \\ & (50 / 60 \mathrm{~Hz}) \end{aligned}$ | $\begin{gathered} 200 \text { to } 230 \\ \text { VAC } \\ (50 / 60 \mathrm{~Hz}) \end{gathered}$ | $\begin{gathered} 200 \text { to } 240 \\ \text { VAC } \\ (50 / 60 \mathrm{~Hz}) \end{gathered}$ | $\begin{gathered} 200 \text { to } 240 \\ \text { VAC } \\ (50 / 60 \mathrm{~Hz}) \end{gathered}$ |
| Reference page | 777 |  |  |  |  |  |  |  |

*1 Copper and zinc materials are used for the motors, cables, controllers/drivers.
*2 The LECSN-T only supports PROFINET and EtherCAT ${ }^{\circledR}$.

# Electric Actuator Rod Type semonay bitien Conpaide 

## How to Order


*1 For motor type V6, the compatible driver part number suffix is V 5 .
5 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])

| 8 Rod end thread |  |
| :---: | :---: |
| Nil | Rod end female thread |
| $\mathbf{M}$ | Rod end male thread <br> $(1$ rod end nut is included.) |


| 6 Stroke [mm] |
| :--- |
| $\mathbf{3 0}$ |
| to |
| 500 |

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


## (9) Mounting* ${ }^{*}$


7 Motor option

| Nil | Without option |
| :---: | :---: |
| $\mathbf{B}$ | 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
*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
*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 or less. Check for interference with workpieces before selecting a model.

*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 $^{* 1}$ | Flange | Double clevis |
| :---: | :---: | :---: | :---: |
| $\mathbf{2 5}$ | $25-$ LEY-L025 | $25-$ LEY-F025 | $25-$ LEY-D025 |
| $\mathbf{3 2}$ | $25-$ LEY-L032 | $25-$ LEY-F032 | $25-$ LEY-D032 |
| Surface <br> treatment | RAYDENT ${ }^{\circledR}$ | RAYDENT® | Coating <br> (Size 16: Electroless nickel plating) |

*1 When ordering foot brackets, order 2 pieces per actuator.

* Parts belonging to each bracket are as follows.

Solid state auto switches should be ordered separately. For details on auto switches, refer to page 681.

D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900 Body mounting bolt

## Applicable Stroke Table

| Applicable Stroke Table $\quad$ O: Standard |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model Stroke <br> $[\mathrm{mm}]$ | 30 | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | Manufacturable stroke range [mm] |
| 25A-LEY25 | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | - | $\bigcirc$ | $\bigcirc$ | - | - | - | - | - | 15 to 400 |
| 25A-LEY32 | - | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | 20 to 500 |

[^2]

Motor mounting position: Top/Parallel


Motor mounting position: In-line

| 10 Cable type ${ }^{* 1 * 2}$ |
| :--- |
| Nil |
| S | Without 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
$13 \mathrm{I} / \mathrm{O}$ cable length [m]*1

11 Cable length [m]**

| Nil | Without cable |
| :---: | :---: |
| $\mathbf{3}$ | 3 |
| $\mathbf{5}$ | 5 |
| $\mathbf{A}$ | 10 |
| $\mathbf{C}$ | 20 |

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

12 Driver type

|  | Compatible drivers | Power supply voltage [V] |
| :---: | :---: | :---: |
| Nil | Without driver | - |
| M2 | LECYM2-V $\square$ | 200 to 230 |
| U2 | LECYU2-V $\square$ | 200 to 230 |

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

| Nil | Without cable |
| :---: | :---: |
| $\mathbf{H}$ | Without cable (Connector only) |
| $\mathbf{1}$ | 1.5 |

*1 When "Without driver" is selected for driver type, only "Nil: Without cable" can be selected. Refer to page 808 if I/O cable is required.

## 25A-Series <br> Applicable Auto Switches

## Applicable Electric Actuator Series

| Auto switches |  |  |  |  |  |  |  |  |  |  |  | Electric actuators |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Type | Special function | Electrical entry | Indicator light | Wiring (Output) | Electrical | Auto switch model | Lead wire length [m] |  |  |  | Pre-wired connector | LEJS | LEY |
|  |  |  |  |  | entry direction |  | 0.5 | 1 $M$ | L | Z | connector | 40 to 63 | 16 to 40 |
| Solid state auto switch | - | Grommet | Yes | 3-wire (NPN) | In-line | D-M9N-900 | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | - | - | - |
|  |  |  |  | 3-wire (PNP) |  | D-M9P-900 | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | - | $\bigcirc$ | $\bigcirc$ |
|  |  |  |  | 2-wire |  | D-M9B-900 | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | - | $\bigcirc$ | $\bigcirc$ |
|  |  |  |  | 3-wire (NPN) | Perpendicular | D-M9NV-900 | $\bullet$ | $\bullet$ | $\bullet$ | $\bigcirc$ | - | $\bigcirc$ | $\bigcirc$ |
|  |  |  |  | 3-wire (PNP) |  | D-M9PV-900 | $\bigcirc$ | $\bullet$ | $\bigcirc$ | $\bigcirc$ | - | $\bigcirc$ | $\bigcirc$ |
|  |  |  |  | 2-wire |  | D-M9BV-900 | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | - | $\bigcirc$ | $\bigcirc$ |
|  | Diagnostic indication (2-color indicator) |  |  | 3-wire (NPN) | In-line | D-M9NW-900 | $\bigcirc$ | $\bigcirc$ | $\bullet$ | $\bigcirc$ | - | $\bigcirc$ | $\bigcirc$ |
|  |  |  |  | 3-wire (PNP) |  | D-M9PW-900 | $\bullet$ | $\bullet$ | $\bigcirc$ | $\bigcirc$ | - | $\bigcirc$ | $\bigcirc$ |
|  |  |  |  | 2-wire |  | D-M9BW-900 | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
|  |  |  |  | 3-wire (NPN) | Perpendicular | D-M9NWV-900 | $\bigcirc$ | $\bigcirc$ | $\bullet$ | $\bigcirc$ | - | $\bigcirc$ | $\bigcirc$ |
|  |  |  |  | 3-wire (PNP) |  | D-M9PWV-900 | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | - | $\bigcirc$ | $\bigcirc$ |
|  |  |  |  | 2-wire |  | D-M9BWV-900 | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |

* Solid state auto switches marked with "○" are produced upon receipt of order.
* Auto switches cannot be ordered with the actuator part number. They should be ordered separately. Please refer below for ordering. One each of the right-hand-type and the left-hand-type are shipped together with the actuator.


## Ordering the Auto Switches

- Individual auto switch: D-M9BWL-900
(Place the order with the part number for auto switch shown in the table above.)

| $*$ Lead wire length symbols: $0.5 \mathrm{~m} \ldots \ldots \ldots . . . . . . . \mathrm{Nil}$ | (Example) M9NW |
| ---: | :--- | :--- |
| $1 \mathrm{~m} \ldots \ldots \ldots \ldots . \mathrm{M}$ | (Example) M9NWM |
| $3 \mathrm{~m} \ldots \ldots \ldots . . \mathrm{L}$ | (Example) M9NWL |
| $5 \mathrm{~m} \ldots \ldots \ldots . . \mathrm{Z}$ | (Example) M9NWZ |

## 25A－Series Precautions

## Be sure to read this before handling products．

Be sure to read the＂Handling Precautions for SMC Products＂（M－E03－3）and the＂Operation Manual＂before use．

## Precautions

## $\triangle$ Caution

## －Change of material

For the 25A－series，there is a restriction on the use of copper and zinc as main components in the metal materials used．Keep in mind that the aluminum alloy，aluminum die cast，and some of the stainless steel materials contain traces of copper $(\mathrm{Cu})$ and／or zinc（ Zn ）as an additive element．
However，copper is used in some parts－the coils of solenoid valves，the circuit boards，connector pins，and lead wires of electrical equipment and auto switches，and the motors，cables， and drivers of electric actuators－whose materials cannot be easily changed to alternative materials．
In addition，some magnets（including the surface treatment） contain copper（ Cu ）and／or zinc $(\mathrm{Zn})$ ．However，due to their magnetic characteristics，it is impossible to use alternative materials．

## Chemical environment

Refrain from using the products in such environments as exposed to chemicals．Otherwise，resin parts may deteriorate． If you want SMC to test the products for the effects of chemicals attached to them，send the products back to SMC after thoroughly cleaning them．


[^0]:    ＊Copper and zinc materials are used for the motors，cables，controllers／drivers．

[^1]:    ＊Refer to the Operation Manual for using the products．Please download

[^2]:    * Please consult with SMC for non-standard strokes as they are produced as special orders.

