



Installation and Maintenance Manual

Electric Actuator / Rod Type

Series LEY



Applicable model number:
(*-)LEY*(S/TV)*-*

Note: For special models LEY*-X* please check the appropriate drawing for the dimensions and specifications.

1 Safety Instructions

This manual contains essential information for the protection of users and others from possible injury and/or equipment damage.

- Read this manual before using the product to ensure correct handling and also read the manuals of related apparatus before use.
- Keep this manual in a safe place for future reference.
- These instructions indicate the level of potential hazard by label of "Caution", "Warning" or "Danger", followed by important safety information which must be carefully followed.
- To ensure safety of personnel and equipment the safety instructions in this manual and the product catalogue must be observed, along with other relevant safety practices.

Caution	Indicates a hazard with a low level of risk which, if not avoided, could result in minor or moderate injury.
Warning	Indicates a hazard with a medium level of risk which, if not avoided, could result in death or serious injury.
Danger	Indicates a hazard with a high level of risk which, if not avoided, will result in death or serious injury.

- Electromagnetic compatibility: This product is class A equipment that is

intended for use in an industrial environment. There may be potential difficulties in ensuring electromagnetic compatibility in other environments due to conducted as well as radiated disturbances.

Warning

- **Do not disassemble, modify (including change of printed circuit board) or repair the product.**
An injury or product failure may result.
- **Do not operate the product beyond the specification range.**
Fire, malfunction or equipment damage may result.
Use the product only after confirming the specifications.
- **Do not use the product in the presence of flammable, explosive or corrosive gas.**
Fire, explosion or corrosion may result.
This product does not have an explosion proof construction.
- **When using the product as part of an interlocking system:**
Provide a double interlocking system, for example a mechanical system.
Check the product regularly to ensure correct operation.
- **Before performing maintenance, be sure of the following:**
Turn off the power supply.

Caution

- **Always perform a system check after maintenance.**
Do not use the product if any error occurs.
Safety cannot be assured if caused by un-intentional malfunction.
- **Provide grounding to ensure correct operation and to improve noise resistance of the product.**
This product should be individually grounded using a short cable.
- **Follow the instructions given below when handling the product.**
Failing to do so may result in product damage.
- **Maintenance spaces should always be provided around the product.**
- **Do not remove labels from the product.**
- **Do not drop, hit or apply excessive shock to the product.**
- **Unless stated otherwise, follow all specified tightening torques.**
- **Do not bend, apply tensile force, or apply force by placing heavy loads on the cables.**

1 Safety Instructions (continued)

- **Connect wires and cables correctly and do not connect while the power is turned on.**
- **Do not route input/output wires and cables together with power or high-voltage cables.**
- **Check the insulation of wires and cables.**
- **Take appropriate measures against noise, such as noise filters, when the product is incorporated into other equipment or devices.**
- **Take sufficient shielding measures when the product is to be used in the following conditions:**
 - Where noise due to static electricity is generated.
 - Where electro-magnetic field strength is high.
 - Where radioactivity is present.
 - Where power lines are located.
- **Do not use the product in a place where electrical surges are generated.**
- **Use suitable surge protection when a surge generating load such as a solenoid valve is to be directly driven.**
- **Prevent any foreign matter from entering this product.**
- **Do not expose the product to vibration or impact.**
- **Use the product within the specified ambient temperature range.**
- **Do not expose the product to any heat radiation.**
- **Use a precision screwdriver with flat blade to adjust the DIP switch.**
- **Close the cover over the switches before power is turned on.**
- **Do not clean the product with chemicals such as benzene or thinners.**

2 General Instructions

2.1 Wiring

Warning

- **Adjusting, mounting or wiring change should not be done before disconnecting the power supply to the product.**
Electrical shock, malfunction and damage can result.
- **Do not disassemble the cables.**
- **Use only specified cables.**

- **Do not connect or disconnect the wires, cables and connectors when the power is turned on.**

Caution

- **Wire the connector correctly and securely.**
Check the connector for polarity and do not apply any voltage to the terminals other than those specified in the Operation Manual.
- **Take appropriate measures against noise.**
Noise in a signal line may cause malfunction. As a countermeasure separate the high voltage and low voltage cables, and shorten the wiring lengths, etc.
- **Do not route input/output wires and cables together with power or high voltage cables.**
The product can malfunction due to interference of noise and surge voltage from power and high voltage cables to the signal line. Route the wires of the product separately from power or high voltage cables.
- **Take care that actuator movement does not catch cables.**
- **Operate with all wires and cables secured.**
- **Avoid bending cables at sharp angles where they enter the product.**
- **Avoid twisting, folding, rotating or applying an external force to the cable.**
Risk of electric shock, wire breakage, contact failure and loss of control of the product can happen.
- **Select "Robotic cables" in case of inflecting cable (encoder/ motor/ rock) repeatedly.**
Refer to the "Driver operation manual" for the bending life of the bending radius of the cable.

2 General Instructions (continued)

- **Confirm correct insulation of the product.**
Poor insulation of wires, cables, connectors, terminals etc. can cause interference with other circuits. Also there is the possibility that excessive voltage or current may be applied to the product causing damage.

2.2 Transportation

Caution

- **Do not carry or swing the product by the cables.**

2.3 Mounting

Warning

- **Observe the tightening torque for screws.**
Unless stated otherwise, tighten the screws to the recommended torque for mounting the product.
- **Do not make any alterations to this product.**
Alterations made to this product may lead to a loss of durability and damage to the product, which can lead to human injury and damage to other equipment and machinery.
- **When an external guide is used, connect the moving parts of the product and the load in such a way that there is no interference at any point within the stroke.**
Do not scratch or dent the sliding parts of the table or mounting face etc., by striking or holding them with other objects. The components are manufactured to precise tolerances, so that even a slight deformation may cause faulty operation or seizure.
- **Do not use the product until you verify that the equipment can be operated correctly.**
After mounting or repair, connect the power supply to the product and perform appropriate functional inspections to check it is mounted correctly.
- **When attaching to the work piece, do not apply strong impact or large moment.**
If an external force over the allowable moment is applied, it may cause looseness in the guide unit, an increase in sliding resistance or other problems.
- **Maintenance space**
Allow sufficient space for maintenance and inspection.

2.4 Handling

Warning

- **Do not touch the motor while in operation.**
The surface temperature of the motor can increase to approx. 80°C due to operating conditions.
Energizing alone may also cause this temperature increase.
As it may cause burns, do not touch the motor when in operation.
- **If abnormal heating, smoking or fire, etc. occurs in the product, immediately turn off the power supply.**
- **Immediately stop operation if abnormal operation noise or vibration occurs.**
If abnormal operation noise or vibration occurs, the product may have been mounted incorrectly. Unless operation of the product is stopped for inspection, the product can be seriously damaged.
- **Never touch the rotating part of the motor or the moving part of the actuator while in operation.**
There is a serious risk of injury.
- **When installing, adjusting, inspecting or performing maintenance on the product, Driver and related equipment, be sure to turn off the power supply to each of them. Then, lock it so that no one other than the person working can turn the power on, or implement measures such as a safety plug.**

Caution

- **Keep the driver and product combined as delivered for use.**
The product is set in parameters for shipment.
If it is combined with a different product parameter, failure can result.

2 General Instructions (continued)

- **Check the product for the following points before operation.**
 - Damage to electric driving line and signal lines.
 - Looseness of the connector to each power line and signal line.
 - Looseness of the actuator/cylinder and driver mounting.
 - Abnormal operation.
 - Stop function
- **When more than one person is performing work, decide on the procedures, signals, measures and resolution for abnormal conditions before beginning the work.**
- **Also designate a person to supervise the work, other than those performing the work.**
- **An operation test should be performed at low speed, start the test at a predefined speed, after confirming there are no problems.**
- **Actual speed of the product will be changed by the workload.**
Before selecting a product, check the catalogue for the instructions regarding selection and specifications.
- **Do not apply a load, impact or resistance in addition to a transferred load during return to origin.**
In the case of the return to origin by pushing force, additional force will cause displacement of the origin position since it is based on detected motor torque.
- **Do not remove the nameplate.**

2.5 Actuator with lock

Warning

- **Do not use the lock as a safety lock or a control that requires a locking force.**
The lock used is designed to prevent dropping of work piece.
- **For vertical mounting, use the product with a lock.**
If the product is not equipped with a lock, the product will move and drop the work piece when the power is removed.
- **"Measures against drops," means preventing a work piece from dropping due to its weight when the product operation is stopped and the power supply is turned off.**
- **Do not apply an impact load or strong vibration while the lock is**

activated.

If an external impact load or strong vibration is applied to the product, the lock will lose its holding force and damage to the sliding part of the lock or reduced lifetime can result. The same situation will happen when the lock slips due to a force higher than its holding force, as this will accelerate the wear to the lock.

- **Do not apply liquid, oil or grease to the lock or its surroundings.**
When liquid, oil or grease is applied to the sliding part of the lock, its holding force will be reduced significantly.
- **Take "measures against drops" and check that safety is assured before mounting, adjustment and inspection of the product.**
If the lock is released with the product mounted vertically, a work piece can drop due to its weight.

2.6 Please refer to the auto switch references in "Best Pneumatics" when an auto switch is to be used.

2.7 Unpacking

Caution

- **Check the received product is as ordered.**
If a different product is installed from the one ordered, injury or damage could result.

3 Specifications

Model	LEY25 (Parallel type)				LEY32 (Parallel type)				LEY32D (In-line type)				LEY63 (Parallel type)			
	LEY25D (Parallel type)				LEY32D (In-line type)				LEY63D (In-line type)							
Stroke [mm] ¹⁾	30, 50, 100, 150, 200, 250, 300, 350, 400, 450, 500				30, 50, 100, 150, 200, 250, 300, 350, 400, 450, 500				100, 200, 300, 400, 500, 600, 700, 800							
Work load [kg]	Horizontal ²⁾				Vertical ²⁾				Horizontal ²⁾				Vertical ²⁾			
	18, 30, 50, 60, 80, 115				18, 30, 50, 60, 80, 115				18, 30, 50, 60, 80, 115				18, 30, 50, 60, 80, 115			
Pushing force [N] ³⁾	180, 300, 450, 600, 800, 1150				180, 300, 450, 600, 800, 1150				180, 300, 450, 600, 800, 1150				180, 300, 450, 600, 800, 1150			
Maximum Speed [mm/s] ⁴⁾	Range of stroke	to 300	900	450	225	1200	600	300	1000	500	250	1000	500	250		
		305 to 400	600	300	150	800	400	200	640	320	160	800	400	200		
		405 to 500	-	-	-	-	-	-	-	-	-	800	400	200		
		505 to 600	-	-	-	-	-	-	-	-	-	600	300	150		
		605 to 700	-	-	-	-	-	-	-	-	-	500	250	125		
705 to 800	-	-	-	-	-	-	-	-	-	-	-	-	-			
Pushing speed [mm/s] ⁵⁾	35 or less				30 or less				30 or less							
acceleration/deceleration [mm/s ²]	5,000				5,000				5,000							
Positioning repeatability [mm]	Basic type				Basic type				Basic type							
	±0.02				±0.01				±0.01							
Lost motion [mm] ⁶⁾	Basic type				Basic type				Basic type							
	0.1 or less				0.1 or less				0.05 or less							
Lead [mm] (including pulley ratio)	12	6	3	20	10	5	16	8	4	20	10	5	2.66			
Impact resistance/vibration Resistance [m/s ²] ⁷⁾	50 / 20				50 / 20				50 / 20							
Drive method	Ball screw and Belt [1:1] / Ball screw				Ball screw and Belt [1:1] / Ball screw				Ball screw and Belt [1:1] / Ball screw							
Guide type	Sliding bush (Piston rod part)				Sliding bush (Piston rod part)				Sliding bush (Piston rod part)							
Operating temperature range [°C]	5 to 40				5 to 40				5 to 40							
Operating humidity range [%RH]	90 or less (No condensation)				90 or less (No condensation)				90 or less (No condensation)							
Motor output/size	100W / □40				200W / □60				400W / □60							
Type of Motor	AC servo motor															
Type ⁸⁾	No excitation operating type															
Holding force [N]	131	255	485	157	308	588	197	385	736	313	607	1146	2006			
Rated voltage	6.3 / 5.5				7.9 / 6				7.9 / 6				7.9 / 6			
	24 VDC ⁹⁾															

Product Weight [kg]

Model	LEY25 (Parallel type)										LEY25D (In-line mounting type)										
	Stroke [mm]	30	50	100	150	200	250	300	350	400	30	50	100	150	200	250	300	350	400		
Type of Motor	Incremental Encoder[S2]	1.3	1.4	1.6	1.8	2.0	2.2	2.3	2.5	2.7	1.3	1.4	1.6	1.8	2.0	2.2	2.4	2.5	2.7		
	Absolute Encoder[S6]	1.4	1.5	1.6	1.9	2.1	2.2	2.4	2.6	2.8	1.4	1.5	1.6	1.9	2.1	2.3	2.4	2.6	2.8		
	Absolute Encoder[T6]	1.4	1.5	1.6	1.9	2.1	2.2	2.4	2.6	2.7	1.4	1.5	1.6	1.9	2.1	2.3	2.4	2.6	2.8		
	Absolute Encoder[V6]	1.2	1.3	1.6	1.7	1.9	2.1	2.2	2.4	2.6	1.2	1.3	1.6	1.7	1.9	2.1	2.3	2.4	2.6		
Model	LEY32 (Parallel type)										LEY32D (In-line mounting type)										
	Stroke [mm]	30	50	100	150	200	250	300	350	400	30	50	100	150	200	250	300	350	400		
Type of Motor	Incremental Encoder[S3]	2.4	2.5	2.8	3.3	3.8	4.1	4.4	4.7	5.0	2.4	2.6	2.8	3.3	3.6	3.9	4.2	4.4	4.7	5.0	
	Absolute Encoder[S7]	2.4	2.5	2.8	3.2	3.5	3.8	4.1	4.4	4.6	4.9	2.4	2.5	2.8	3.2	3.5	3.8	4.1	4.4	4.7	5.0
	Absolute Encoder[T7]	2.3	2.4	2.7	3.2	3.5	3.8	4.1	4.3	4.6	4.9	2.3	2.4	2.7	3.2	3.5	3.8	4.1	4.4	4.6	4.9
	Absolute Encoder[V7]	2.3	2.4	2.7	3.2	3.5	3.8	4.0	4.3	4.6	4.9	2.3	2.4	2.7	3.2	3.5	3.8	4.1	4.3	4.6	4.9
Model	LEY63 (Parallel type)										LEY63D (In-line mounting type)										
	Stroke [mm]	100	200	300	400	500	600	700	800	100	200	300	400	500	600	700	800				
Type of Motor	Incremental Encoder[S4]	5.4	6.6	8.3	9.4	10.5	12.2	13.4	14.5	5.6	6.7	8.4	9.6	10.7	12.4	13.5	14.7				
	Absolute Encoder[S8]	5.5	6.7	8.4	9.5	10.6	12.3	13.5	14.6	5.7	6.8	8.5	9.7	10.8	12.5	13.6	14.8				
	Absolute Encoder[T8]	5.4	6.6	8.3	9.4	10.5	12.2	13.4	14.5	5.6	6.7	8.4	9.6	10.7	12.4	13.5	14.7				
	Absolute Encoder[V8]	5.3	6.5	8.2	9.3	10.4	12.1	13.3	14.4	5.5	6.6	8.3	9.5	10.6	12.3	13.4	14.6				

Additional weight for lock accessories [kg]

Size	25	32	63	Size	25	32	63
	Foot style (Body mounting screw is included, 2sets)	0.2	0.4		0.4	Foot style (Body mounting screw is included)	0.08
Foot side flange style (Body mounting screw is included)	0.3	0.7	0.6	Motor side flange style (Body mounting screw is included)	0.17	0.20	0.51
Double clevis style (Clevis pin, Type C retaining ring for axis, Body mounting bolt is included)	0.3	0.4	0.4	Double clevis style (Clevis pin, Type C retaining ring for axis, Body mounting bolt is included)	0.16	0.22	0.58

Note 1) Strokes other than the above are produced as a special order.

Note 2) The maximum value of the horizontal workload. (An external guide is necessary). The actual workload will depend on the type of external guide.

Note 3) Thrust setting range when "pushing" operation in torque control mode, etc. Refer to the thrust conversion graph shown in the catalogue as a guide.

Set v value LEY25* S/32* S: 15 to 30%
Set v value LEY25* T/32* T: 12 to 24%
Set v value LEY25* V/32* V: 45 to 90%

Set v value LEY63* T: 12 to 40%
Set v value LEY63* S: 15 to 50%

3 Specifications (continued)

Note 4) The allowable speed will be affected by the stroke length.

Note 5) Allowable impact speed when "pushing" operation in torque control mode, etc.

Note 6) Impact resistance: No malfunction occurred when the actuator was tested with a drop tester in both an axial direction and perpendicular direction to the lead screw. (The test was performed with the actuator in the initial state.)

Vibration resistance: No malfunction occurred in a test ranging between 45 to 2000 Hz, when the actuator was tested in both an axial direction and a perpendicular direction to the lead screw. (The test was performed with the actuator in the initial state.)

Note 7) Only when the motor option, "with lock", is selected.

Note 8) For an actuator with lock, add the power consumption for the lock.

Note 9) A reference value for correcting an error in reciprocal operation.

4 Installation

4.1 Design and selection

Warning

- Do not apply a load in excess of the actuator specification.

A product should be selected based on the maximum work load and allowable moment.

If the product is used outside of the operating specification, the eccentric load applied to the guide will become excessive and have adverse effects such as creating play in the guide, reduced accuracy and reduced product life.

- Do not exceed the speed limit of the actuator specification.

Select a suitable actuator by the relationship of allowable work load and speed.

Noise or reduction of accuracy may occur if the actuator is operated in excess of its specification and could lead to reduced accuracy and reduced product life.

- Do not use the product in applications where excessive external force or impact force is applied to it.

This can lead to premature failure of the product.

4.2 Handling

Caution

- Do not operate by fixing the piston rod and moving the actuator body.

An excessive load will be applied to the piston rod, leading to damage to the actuator and reduced lifetime.

- Avoid using the electric actuator in a way that rotational torque would be applied to the piston rod.

If rotational torque is applied to the piston rod the non-rotating guide will become damaged or deformed and non-rotational accuracy will be reduced. (Refer to the allowable rotational torque table below)

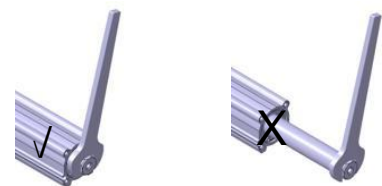
Allowable Rotational torque (Nm or less)	LEY25	LEY32	LEY63
		1.1	1.4

To attach / screw a bracket or nut to the end of the piston rod.

The piston rod should be fully retracted.

Hold the piston rod by the square across flats end with a spanner or other means to prevent the piston rod from rotating.

Ensure that the bracket, screw or nut is installed correctly and tightened to the specified torque value given in this document.



4 Installation (continued)

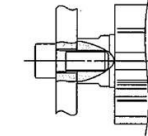
4.3 Mounting

Caution

- When mounting the product, use screws with adequate length and tighten them to the recommended torque.

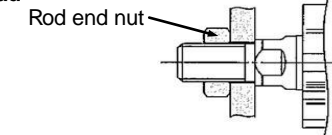
Tightening with larger torque than the specified range may cause malfunction while the tightening with smaller torque can allow the displacement of actuator position. In extreme conditions the actuator could become detached from its mounting position.

Work fixed/Rod end female thread



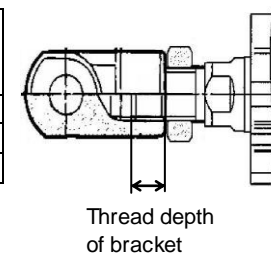
Model	Screw	Max. tightening torque [Nm]	Max. thread depth L [mm]	Rod end width across flats [mm]
LEY25	M8 x 1.25	12.5	13	17
LEY32	M8 x 1.25	12.5	13	22
LEY63	M16 x 2	106	21	36

Work fixed/Rod end male thread



Model	Screw	Max. tightening torque [Nm]	Max. thread length L [mm]	Rod end width across flats [mm]
LEY25	M14 x 1.5	65.0	20.5	17
LEY32	M14 x 1.5	65.0	20.5	22
LEY63	M18 x 1.5	97	26	36

Model	Rod end nut		thread depth of bracket [mm]
	Width across flats [mm]	Length [mm]	
LEY25	22	8	14
LEY32	22	8	14
LEY63	27	11	18



- Tighten the product mounting screws to the specified torque. Tightening to a torque over the specified range can cause operation failure, and insufficient torque can cause displacing or dropping of the attachment.

Mounting / Screw bottom tapped style

(When "Body bottom tapped" is selected)

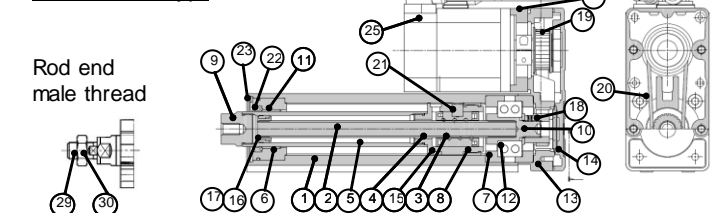
Model	Screw	Max. tightening torque [Nm]	Max. thread depth L [mm]
LEY25	M5 x 0.8	3.0	6.5
LEY32	M6 x 1.0	5.2	8.5
LEY63	M8x1.25	12.5	10

Mounting / Rod side - Head side tapped style

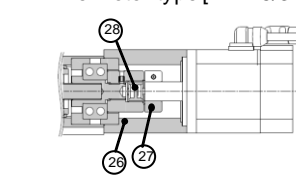
Model	Screw	Max. tightening torque [Nm]	Max. thread depth L [mm]
LEY25	M5 x 0.8	3.0	8
LEY32	M6 x 1.0	5.2	10
LEY63	M8 x 1.25	12.5	16

5 Names and Functions of Individual Parts

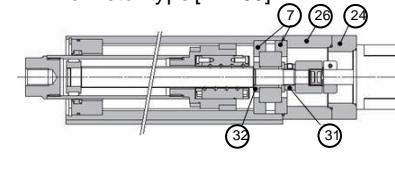
Parallel motor type



In-line motor type [LEY25/32]



In-line motor type [LEY63]



No.	Part	Material	Remarks
1	Body	Aluminium alloy	Anodized
2	Ball screw shaft	Alloy steel	
3	Ball screw nut	-	
4	Piston	Aluminium alloy	
5	Piston rod	Stainless steel	Hard chrome anodized
6	Rod cover	Aluminium alloy	
7	Bearing holder	Aluminium alloy	
8	Rotation stopper	POM	
9	Socket	Free cutting carbon steels	Nickel plated
10	Connected shaft	Free cutting carbon steels	Nickel plated
11	Bushing	Lead bronze cast	
12	Bearing	-	
13	Pulley box	Aluminium die-cast	Non-Hexavalent chromated
14	Pulley plate	Aluminium die-cast	Non-Hexavalent chromated
15	Magnet	-	

16	Wear ring holder	Stainless steel	Only stroke 101mm or more
17	Wear ring	POM	Only stroke 101mm or more
18	Pulley (For Screw shaft)	Aluminium alloy	
19	Pulley (For motor)	Aluminium alloy	
20	Belt	-	
21	Parallel pin	Stainless steel	
22	Rod seal	NBR	
23	Retaining ring	Steel for spring	
24	Motor adapter	Aluminium alloy	Coating
25	Motor	-	
26	Motor block	Aluminium alloy	Coating
27	Hub	Aluminium alloy	
28	Spider	Urethane	Spider
29	Socket (male thread)	Free cutting carbon steels	Nickel plated
30	Nut	Alloy steel	
31	Lock-nut	Alloy steel	
32	Spacer-A	Stainless steel	

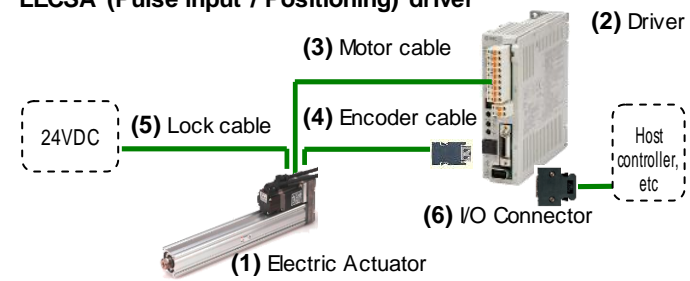
Mounting bracket part number

Size	Foot	Flange	Double clevis
25	LEY-L025	LEY-F025	LEY-D025
32	LEY-L032	LEY-F032	LEY-D032
63	LEY-L063	LEY-F063	LEY-D063

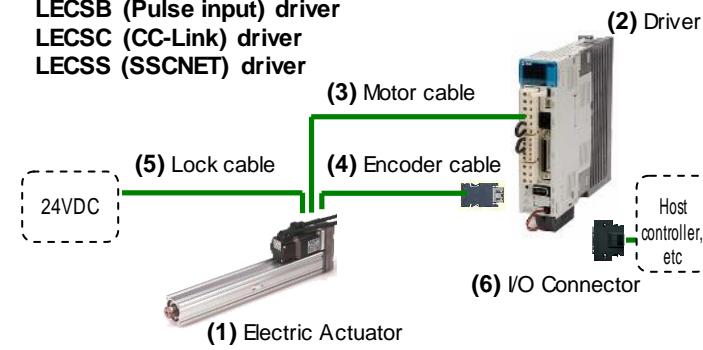
- When ordering foot bracket, order 2 pieces per actuator.
- Parts belonging to each bracket are as follows. Foot, Flange: Body mounting bolt. Double clevis: Clevis pin, Type C retaining ring for axis, Body mounting bolt

6 Wiring

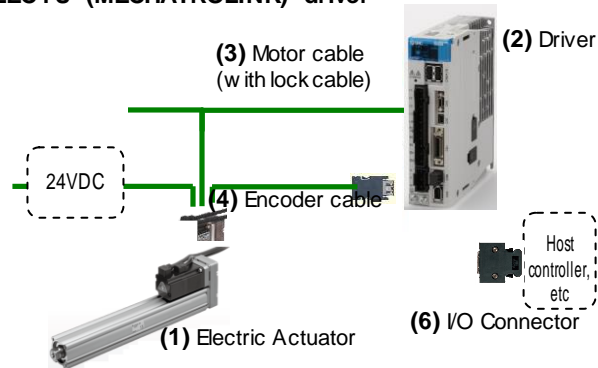
LECSA (Pulse input / Positioning) driver



LECSB (Pulse input) driver LECSA (CC-Link) driver LECSA (SSCNET) driver



LECYM/LECYU (MECHATROLINK) driver



Warning

Use only specified cables otherwise there may be risk of fire and damage

7 Maintenance

Warning

- Do not disassemble or repair the product. Fire or electric shock can result.
- Before modifying or checking the wiring, the voltage should be checked with a tester 5 minutes after the power supply is turned off. Electrical shock can result.

Caution

- Maintenance should be performed according to the procedure indicated in the Operating Manual. Incorrect handling can cause an injury, damage or malfunction of equipment and machinery.
- Removal of product. When equipment is serviced, first confirm that measures are in place to prevent dropping of work pieces and run-away of equipment, etc. and then turn off the power supply to the system. When machinery is restarted, check that operation is normal with actuators in the correct positions.

7 Maintenance (continued)

- The product has been lubricated for life at manufacture, and does not require lubrication in service. Contact SMC if lubrication will be applied. Please read the maintenance manual for each actuator.
- Maintenance frequency. Perform maintenance according to the table below. Contact SMC if any abnormality is found.

	Appearance check	Belt check
Inspection before daily operation	○	○
Inspection every 6 months / 250 km / 5 million cycles *	○	○
Inspection every 5 million cycles / yearly *	○	○

* Whichever occurs first

Items for visual appearance check.

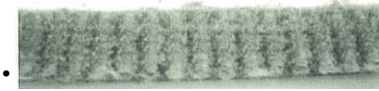
Loose screws, abnormal dirt.
Check of flaws and cable joint.
Vibration, noise.

Items for belt check

Check the belt regularly as shown in "maintenance frequency". Stop operation immediately and contact SMC when the belt appears to be like the photographs shown below.

Tooth shape canvas is worn out

Canvas fibre becomes fuzzy.
Rubber is removed and the fibre becomes whitish.
Lines of fibres become unclear.



Teeth become fuzzy

the belt threads stick out.

Belt partially cut



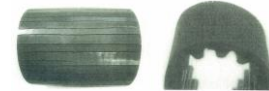
Belt is partially cut;
Foreign matter caught in teeth other than cut part causes flaw.

Vertical line of belt teeth

Flaw which is made when the belt runs on the flange.

Rubber back of the belt is softened and sticky.

Crack on the back of the belt.



8 CE Directive

Electromagnetic Compatibility (EMC) Directive

The LE series actuators and motor drivers conform to the EMC directive, if they are installed in accordance with the following instructions.

These components are intended for incorporation into machinery and assemblies forming part of a larger system. The CE compliance was achieved when the above two components were connected as shown in the diagram below.

Please note that the EMC performance changes according to the configuration of the customer's control panel and the relationship with other electrical equipment and wiring. Therefore conformity to 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 conformity to the EMC directive for the machinery and equipment as a whole.

Low Voltage Directive (LVD)

The LE series of actuators and drivers are in compliance with the LVD. Please refer to the relevant manuals for installation guidelines.

Grounding the actuator and the driver

Please refer to the IMM of the LEC driver used along with the actuator for the information of grounding.

8 CE Directive

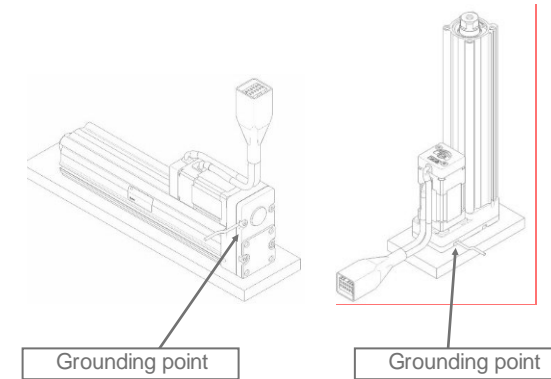
Location of grounding point

If the actuator needs the ground that is bolted, see below figure. The bolt, cable with crimping terminal and toothed washer should be obtained separately.

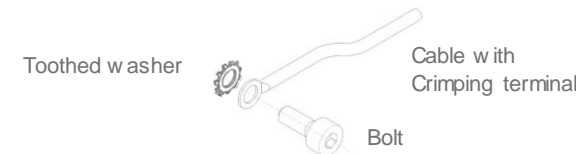
Top mounting type



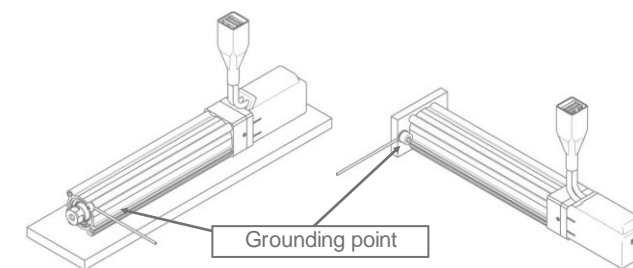
Location of grounding point



In-line mounting type



Location of grounding point



9 Contacts

AUSTRIA	(43) 2262 62280-0	LATVIA	(371) 781 77 00
BELGIUM	(32) 3 355 1464	LITHUANIA	(370) 5 264 8126
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