

Electric Slide Table/High Rigidity Type

Step Motor (Servo/24 VDC)

Servo Motor (24 VDC)

Series *LESH*

LESH8, 16, 25



How to Order

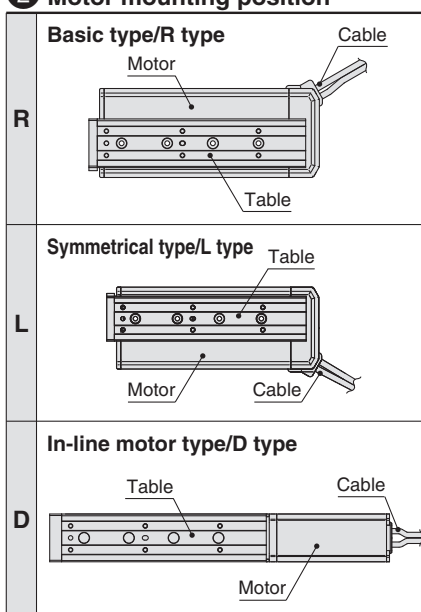
LESH **8** **R** **J** - **50** **S** **1** **6N** **1**

1 2 3 4 5 6 7 8 9 10 11 12 13

1 Size

8
16
25

2 Motor mounting position



3 Motor type

Symbol	Type	Compatible controllers/driver
Nil	Step motor (Servo/24 VDC)	LECP6 LECP1 LECPA
A	Servo motor* (24 VDC)	LECA6

* LESH25DA is not available.

Caution

[CE-compliant products]

① EMC compliance was tested by combining the electric actuator LESH series and the controller LEC series. The EMC depends on 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.

② For the servo motor (24 VDC) specification, EMC compliance was tested by installing a noise filter set (LEC-NFA). Refer to page 61 for the noise filter set. Refer to the LECA Operation Manual for installation.

[UL-compliant products]

When conformity to UL is required, the electric actuator and controller/driver should be used with a UL1310 Class 2 power supply.

4 Lead [mm]

Symbol	LESH8	LESH16	LESH25
J	8	10	16
K	4	5	8

5 Stroke [mm]

Model \ Stroke	50	75	100	150
LESH8	●*	●	—	—
LESH16	●*	—	●	—
LESH25	●	—	●	●

* R/L type with lock is not available.

6 Motor option

Nil	Without option
B	With lock

7 Body option

Nil	Without option
S	Dustproof specification*

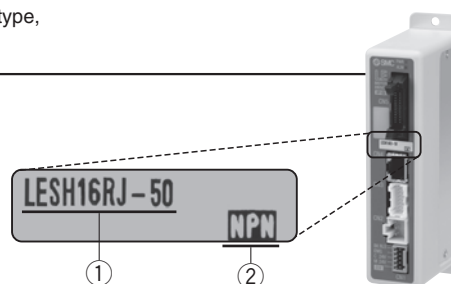
* For R/L type (IP5X equivalent), a scraper is mounted on the rod cover, and gaskets are mounted on both the end covers. For D type, a scraper is mounted on the rod cover.

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

Confirm that the combination of the controller/driver and the actuator is correct.

<Check the following before use.>

- Check the actuator label for model number. This matches the controller/driver.
- Check Parallel I/O configuration matches (NPN or PNP).



* Refer to the operation manual for using the products. Please download it via our website, <http://www.smcworld.com>

Electric Slide Table/High Rigidity Type **Series LESH**



Basic type (R type)



Symmetrical type (L type)

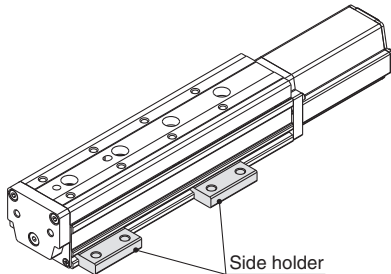


In-line motor type (D type)

8 Mounting*

Symbol	Mounting	R type L type	D type
Nil	Without side holder	●	●
H	With side holder (4 pcs.)	—	●

* Refer to page 48 for details.



9 Actuator cable type*1

Nil	Without cable
S	Standard cable*2
R	Robotic cable (Flexible cable)

*1 The standard cable should be used on fixed parts. For using on moving parts, select the robotic cable.

*2 Only available for the motor type "Step motor."

10 Actuator cable length [m]

Nil	Without cable
1	1.5
3	3
5	5
8	8*
A	10*
B	15*
C	20*

* Produced upon receipt of order (Robotic cable only)
Refer to the specifications Note 3) on page 35.

11 Controller/Driver type*1

Nil	Without controller/driver	
6N	LECP6/LECA6	NPN
6P	(Step data input type)	PNP
1N	LECP1*2	NPN
1P	(Programless type)	PNP
AN	LECPA*2	NPN
AP	(Pulse input type)	PNP

*1 Refer to page 52 for the detailed specifications of the controller/driver.

*2 Only available for the motor type "Step motor."

12 I/O cable length [m]*1

Nil	Without cable
1	1.5
3	3*2
5	5*2

*1 When "Without controller/driver" is selected for controller/driver types, I/O cable cannot be selected. Refer to page 61 (For LECP6/LECA6), page 74 (For LECP1) or page 81 (For LECPA) if I/O cable is required.

*2 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.

13 Controller/Driver mounting

Nil	Screw mounting
D	DIN rail mounting*

* DIN rail is not included. Order it separately.
Refer to page 54 for details.

Compatible Controllers/Driver

Type	Step data input type	Step data input type	Programless type	Pulse input type
Series	LECP6	LECA6	LECP1	LECPA
Features	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)	
Maximum number of step data	64 points		14 points	—
Power supply voltage	24 VDC			
Reference page	Page 53		Page 68	Page 75

Specifications

Step Motor (Servo/24 VDC)

Model		LESH8□		LESH16□		LESH25□		
Actuator specifications	Stroke [mm]		50, 75		50, 100		50, 100, 150	
	Work load [kg] <small>Note 1) 3)</small>	Horizontal	2	1	6	4	9	6
		Vertical	0.5	0.25	2	1	4	2
	Pushing force [N] 30% to 70% <small>Note 2) 3)</small>		6 to 15	4 to 10	23.5 to 55	15 to 35	77 to 180	43 to 100
	Speed [mm/s] <small>Note 1) 3)</small>		10 to 200	20 to 400	10 to 200	20 to 400	10 to 150	20 to 400
	Pushing speed [mm/s]		10 to 20	20	10 to 20	20	10 to 20	20
	Max. acceleration/deceleration [mm/s ²]		5,000					
	Positioning repeatability [mm]		±0.05					
	Screw lead [mm]		4	8	5	10	8	16
	Impact/Vibration resistance [m/s ²] <small>Note 4)</small>		50/20					
Actuation type		Slide screw + Belt (R/L type), Slide screw (D type)						
Guide type		Linear guide (Circulating type)						
Operating temperature range [°C]		5 to 40						
Operating humidity range [%RH]		90 or less (No condensation)						
Electric specifications	Motor size		□20		□28		□42	
	Motor type		Step motor (Servo/24 VDC)					
	Encoder		Incremental A/B phase (800 pulse/rotation)					
	Rated voltage [V]		24 VDC ±10%					
	Power consumption [W] <small>Note 5)</small>		20		43		67	
	Standby power consumption when operating [W] <small>Note 6)</small>		7		15		13	
	Max. instantaneous power consumption [W] <small>Note 7)</small>		35		60		74	
	Lock unit specifications	Type	Non-magnetizing lock					
Holding force [N]		Note 8)	24	2.5	300	48	500	77
Power consumption [W] <small>Note 9)</small>			4		3.6		5	
Rated voltage [V]			24 VDC ±10%					

Note 1) Speed changes according to the work load. Check "Speed-Work Load Graph (Guide)" on page 26.

Note 2) Pushing force accuracy is ±20% (F.S.).

Note 3) The speed and force may change depending on the cable length, load and mounting conditions. Furthermore, if the cable length exceeds 5 m, then it will decrease by up to 10% for each 5 m. (At 15 m: Reduced by up to 20%)

Note 4) Vibration resistance: No malfunction occurred in a test ranging between 45 to 2000 Hz. Test was performed in both an axial direction and a perpendicular direction to the lead screw. (Test was performed with the actuator in the initial state.)

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

Note 5) The power consumption (including the controller) is for when the actuator is operating.

Note 6) The standby power consumption when operating (including the controller) is for when the actuator is stopped in the set position during the operation. Except during the pushing operation.

Note 7) The maximum instantaneous power consumption (including the controller) is for when the actuator is operating. This value can be used for the selection of the power supply.

Note 8) With lock only

Note 9) For an actuator with lock, add the power consumption for the lock.