Environment Clean Room Specification

●ISO Class 4*1 (ISO14644-1)

- Built-in vacuum piping
- Possible to mount the main body without removing the external cover etc.
- Body-integrated linear guide specification

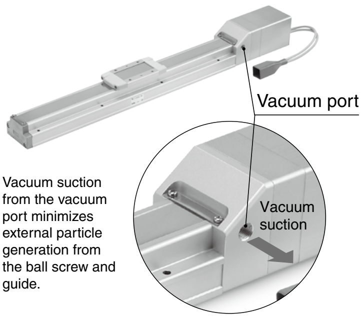
*1 Changes depending on the suction flow rate.

Slider Type Ball Screw Drive/*11-LEFS* *Series*

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

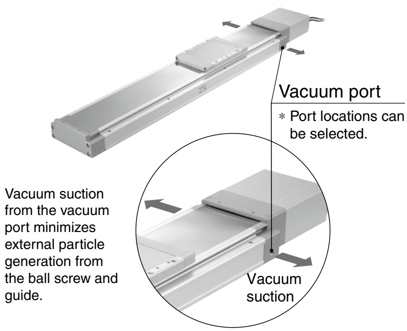
Pages 514, 515-1

AC Servo Motor Type Page 522



High Rigidity Slider Type Ball Screw Drive/*11-LEJS* *Series*

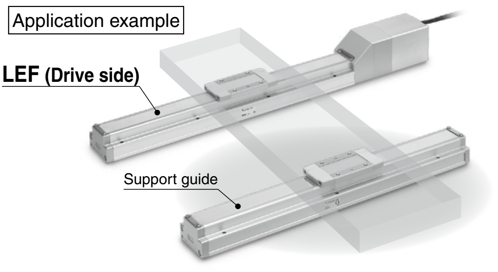
AC Servo Motor Type Page 533

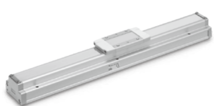


Support Guide/*11-LEFG* *Series* Page 527

A support guide is designed to support workpieces with significant overhang.

- As the dimensions are the same as the LEF series body, installation is simple and contributes to a reduction in installation and assembly labor.
- The standard equipped seal bands prevent grease from splashing and external foreign matter from entering.





⚠Caution

After installing the actuator on the drive side, perform the alignment of the support guide. However, when the mounting flatness exceeds 0.1, install a floating mechanism separately on the workpiece installation surface (table).

Electric Actuator/Slider Type

Ball Screw Drive/*11-LEFS* Series Clean Room Specification

Particle Generation Characteristics

11-LEFS Series ▶Pages 514, 515-1, 522

Particle Generation Measuring Method

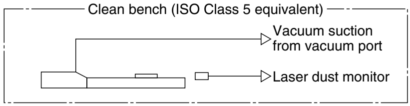
The particle generation data for SMC Clean Series are measured in the following test method.

■Test Method (Example)

Operate the specimen that is placed in an ISO Class 5 equivalent clean bench, and measure the changes of the particle concentration over time until the number of cycles reaches the specified point.

■Measuring Conditions

Measuring instrument	Description	Laser dust monitor (Automatic particle counter by lightscattering method)
	Minimum measurable particle diameter	0.1 μm
	Suction flow rate	28.3 L/min (ANR)
Setting conditions	Sampling time	5 min
	Interval time	55 min
	Sampling air flow	141.5 L (ANR)



Particle generation measuring circuit

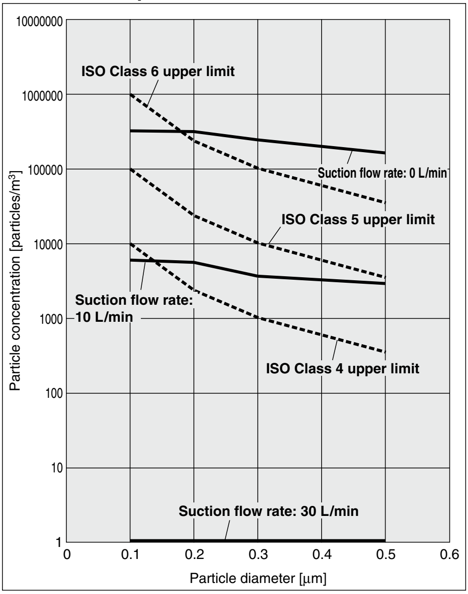
■Evaluation Method

To obtain the measured values of particle concentration, the accumulated value Note 1) of particles captured every 5 minutes, by the laser dust monitor, is converted into the particle concentration in every 1 m^3.
When determining particle generation grades, the 95% upper confidence limit of the average particle concentration (average value), when each specimen is operated at a specified number of cycles Note 2) is considered.
The plots in the graphs indicate the 95% upper confidence limit of the average particle concentration of particles with a diameter within the horizontal axis range.

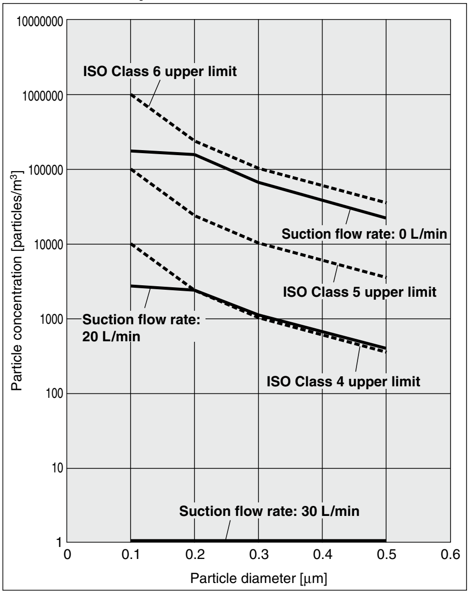
Note 1) Sampling air flow rate: Number of particles contained in 141.5 L (ANR) of air
Note 2) Actuator: 1 million cycles
Note 3) The particle generation characteristics (Page 532) provide a guide for selection but is not guaranteed.
Note 4) When the suction flow rate is 0 L/min, the particle concentration is measured during operation without suction.

Particle Generation Characteristics
Step Motor (Servo/24 VDC), Servo Motor (24 VDC)

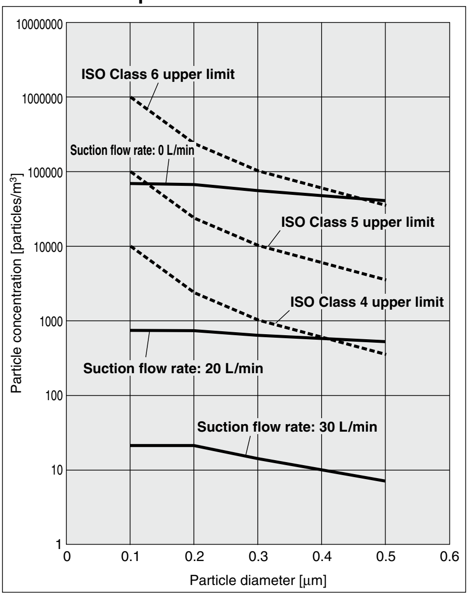
11-LEFS16 Speed 500 mm/s



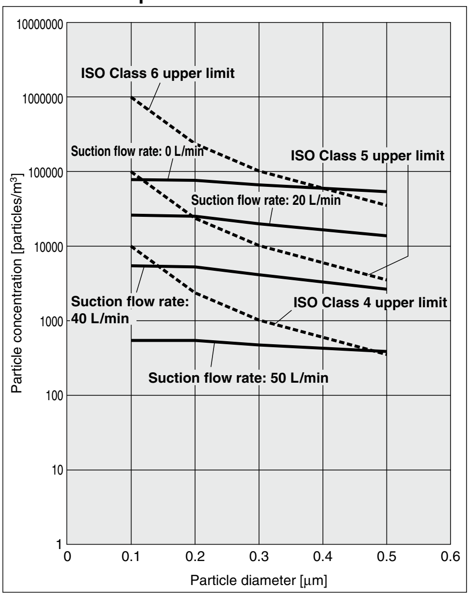
11-LEFS25 Speed 500 mm/s



11-LEFS32 Speed 500 mm/s

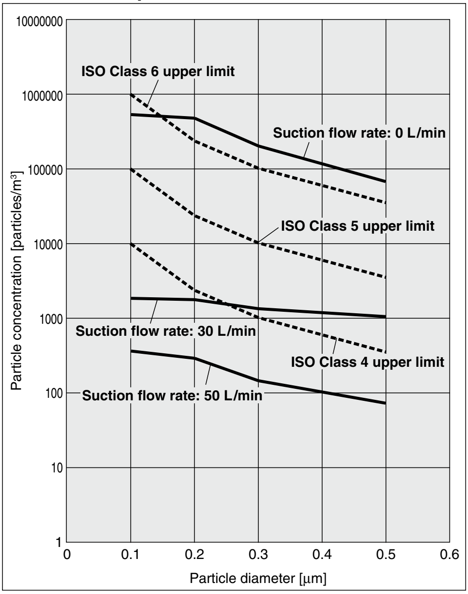


11-LEFS40 Speed 500 mm/s

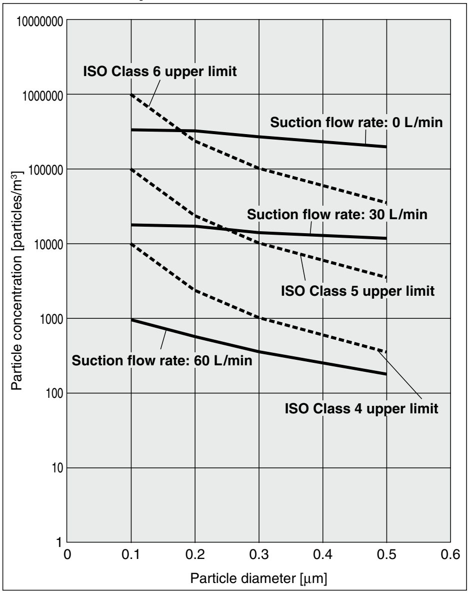


Particle Generation Characteristics
AC Servo Motor (100/200/400 W)

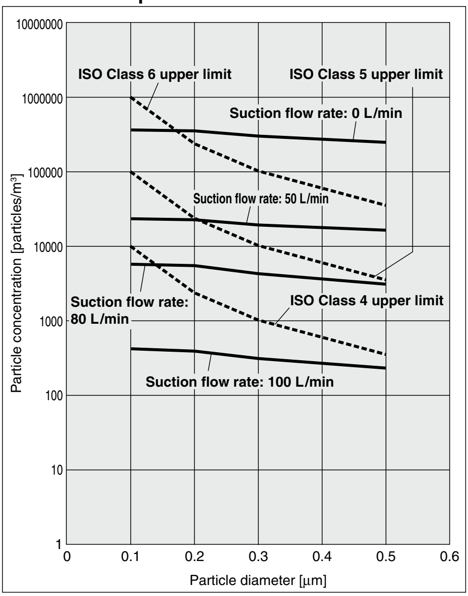
11-LEFS25 Speed 900 mm/s



11-LEFS32 Speed 1000 mm/s



11-LEFS40 Speed 1000 mm/s



Applicable to the LEC□ series

Electric Actuator/Slider Type
Ball Screw Drive Clean Room Specification

11-LEFS Series LEFS16, 25, 32, 40

RoHS

Refer to page 38 for model selection and page 510 for particle generation characteristics.

Refer to page 603-5 for the communication protocols EtherCAT®, EtherNet/IP™, PROFINET, and DeviceNet™.

How to Order

11 – LEFS H 16 □ B – 100 □ □ K – S 1 6N 1 □

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽ ❾ ❿ ⓫ ⓬ ⓭

Clean Series

11	Vacuum type

❶ Accuracy

Nil	Basic type
H	High precision type

❷ Size

16
25
32
40

❸ Motor type

Symbol	Type	Applicable size				Compatible controller/ driver
		11-LEFS16	11-LEFS25	11-LEFS32	11-LEFS40	
Nil	Step motor (Servo/24 VDC)	●	●	●	●	LECP6 LECP1 LECPA LECPMJ
A	Servo motor (24 VDC)	●	●	—	—	LECA6

❹ Lead [mm]

Symbol	11-LEFS16	11-LEFS25	11-LEFS32	11-LEFS40
A	10	12	16	20
B	5	6	8	10

❺ Stroke [mm]

50	50
to	to
1000	1000

* Refer to the applicable stroke table.

❻ Motor option

Nil	Without option
B	With lock

⚠Caution

[CE-compliant products]

① EMC compliance was tested by combining the electric actuator LEF 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 568 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]

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

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]
11-LEFS16	●	●	●	●	●	●	●	●	●	●	—	—	—	—	—	—	—	—	—	—	50 to 500
11-LEFS25	●	●	●	●	●	●	●	●	●	●	●	●	—	—	—	—	—	—	—	—	50 to 600
11-LEFS32	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	—	—	—	—	50 to 800
11-LEFS40	—	—	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	150 to 1000

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

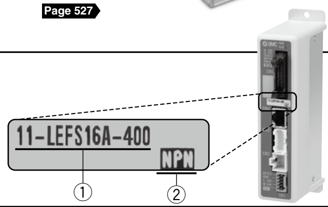
Support Guide/*LEFG* Series
A support guide is designed to support workpieces with significant overhang.
Page 527

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

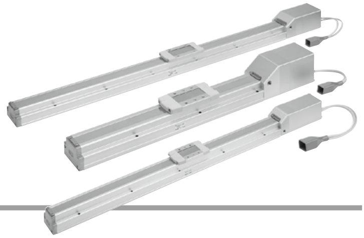
Confirm that the combination of the controller/driver and the actuator is correct.

<Check the following before use.>

① Check the actuator label for model number. This matches the controller/driver.
② Check Parallel I/O configuration matches (NPN or PNP).

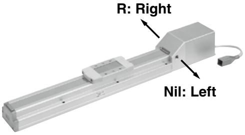


* Refer to the Operation Manual for using the products. Please download it via our website, http://www.smcworld.com

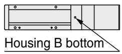
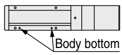


❼ Vacuum port

Nil	Left
R	Right



❽ Positioning pin hole

Nil	Housing B bottom*	
K	Body bottom 2 locations	

∗ Refer to the body mounting example on page 114 for the mounting method.

❾ Actuator cable type*1

Nil	Without cable
S	Standard cable*2
R	Robotic cable (Flexible cable)*3

∗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."
∗3 Fix the motor cable protruding from the actuator to keep it unmovable. For details about fixing method, refer to Wiring/Cables in the Electric Actuators Precautions.

❿ Actuator cable length

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

∗ Produced upon receipt of order (Robotic cable only)
Refer to the specifications Note 2) on pages 516 and 517.

⓫ Controller/Driver type*1

Nil	Without controller/driver	
6N	**LECP6/LECA6** (Step data input type)	NPN
6P		PNP
1N	**LECP1***2 (Programless type)	NPN
1P		PNP
MJ	**LECPMJ***2 *3 (CC-Link direct input type)	—
AN	**LECPA***2 *4 (Pulse input type)	NPN
AP		PNP

∗1 For details about controller/driver and compatible motor, refer to the compatible controller/driver below.
∗2 Only available for the motor type "Step motor."
∗3 Not applicable to CE.
∗4 When pulse signals are open collector, order the current limiting resistor (LEC-PA-R-□) on page 596 separately.

⓬ I/O cable length*1, Communication plug

Nil	Without cable (Without communication plug connector)*3
1	1.5 m
3	3 m*2
5	5 m*2
S	Straight type communication plug connector*3
T	T-branch type communication plug connector*3

∗1 When "Without controller/driver" is selected for controller/driver types, I/O cable cannot be selected. Refer to page 568 (For LECP6/LECA6), page 582 (For LECP1) or page 596 (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.
∗3 For the LECPMJ, only "Nil", "S" and "T" are selectable since I/O cable is not included.

⓭ Controller/Driver mounting

Nil	Screw mounting
D	DIN rail mounting*

∗ DIN rail is not included. Order it separately.

Compatible Controller/Driver

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	Page 560	Page 560	Page 600	Page 576	Page 590

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

Electric Actuator/Slider Type
Ball Screw Drive Clean Room Specification

Applicable to the JXC□ series

11-LEFS Series LEFS16, 25, 32, 40

RoHS

Refer to page 38 for model selection and page 510 for particle generation characteristics.

How to Order

Refer to page 600 for the communication protocol CC-Link.

11 – LEFS H 16 □ B – 100 □ □ K – R1 CD17T

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽ ❾ ❿

Clean Series

11	Vacuum type

❶ Accuracy

Nil	Basic type
H	High precision type

❷ Size

16
25
32
40

❸ Motor type

Symbol	Type	Applicable size				Compatible controller
		11-LEFS16	11-LEFS25	11-LEFS32	11-LEFS40	
Nil	Step motor (Servo/24 VDC)	●	●	●	●	JXCE1 JXC91 JXCP1 JXCD1

❹ Lead [mm]

Symbol	11-LEFS16	11-LEFS25	11-LEFS32	11-LEFS40
A	10	12	16	20
B	5	6	8	10

❺ Stroke [mm]

50	50
to	to
1000	1000

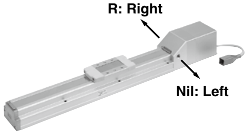
∗ Refer to the applicable stroke table.

❻ Motor option

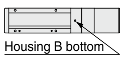
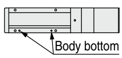
Nil	Without option
B	With lock

❼ Vacuum port

Nil	Left
R	Right



❽ Positioning pin hole

Nil	Housing B bottom∗	 Housing B bottom
K	Body bottom 2 locations	 Body bottom

∗ Refer to the body mounting example on page 114 for the mounting method.

⚠Caution

[CE-compliant products]

EMC compliance was tested by combining the electric actuator LE series and the JXCE1/91/P1/D1 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.

Applicable Stroke Table

●: Standard

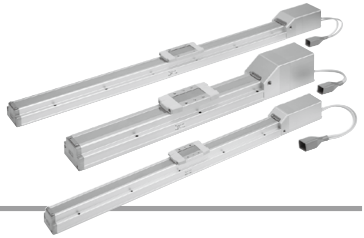
Model \ Stroke [mm]	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	Manufacturable stroke range [mm]
11-LEFS16	●	●	●	●	●	●	●	●	●	●	—	—	—	—	—	—	—	—	—	—	50 to 500
11-LEFS25	●	●	●	●	●	●	●	●	●	●	●	●	—	—	—	—	—	—	—	—	50 to 600
11-LEFS32	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	—	—	—	—	50 to 800
11-LEFS40	—	—	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	150 to 1000

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

Support Guide/*LEFG* Series

A support guide is designed to support workpieces with significant overhang.

Page 527



❾ Actuator cable type/length

Nil	Without cable
S1	Standard cable 1.5 m
S3	Standard cable 3 m
S5	Standard cable 5 m
R1	Robotic cable 1.5 m
R3	Robotic cable 3 m
R5	Robotic cable 5 m
R8	Robotic cable 8 m*1
RA	Robotic cable 10 m*1
RB	Robotic cable 15 m*1
RC	Robotic cable 20 m*1

*1 Produced upon receipt of order (Robotic cable only)
*2 The standard cable should only be used on fixed parts.
For use on moving parts, select the robotic cable.

❿ Controller

Nil	Without controller
C□1□□	With controller

C D 1 7 T

Communication protocol

E	EtherCAT®
9	EtherNet/IP™
P	PROFINET
D	DeviceNet™

For single axis

Mounting

7	Screw mounting
8*	DIN rail

* DIN rail is not included. It must be ordered separately. (Page 603-8)

Communication plug connector for DeviceNet™

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

* Select "Nil" for anything other than DeviceNet™.

Compatible Controller

Type	**EtherCAT® direct input type** 	**EtherNet/IP™ direct input type** 	**PROFINET direct input type** 	**DeviceNet™ direct input type** 
Series	**JXCE1**	**JXC91**	**JXCP1**	**JXCD1**
Features	EtherCAT® direct input	EtherNet/IP™ direct input	PROFINET direct input	DeviceNet™ direct input
Compatible motor	Step motor (Servo/24 VDC)			
Maximum number of step data	64 points			
Power supply voltage	24 VDC			
Reference page	Page 603-5			

Specifications

Step Motor (Servo/24 VDC)

	Model			11-LEFS16		11-LEFS25		11-LEFS32		11-LEFS40	
Actuator specifications	Stroke [mm] Note 1)			50 to 500		50 to 600		50 to 800		150 to 1000	
	Work load [kg] Note 2)	Horizontal	LECP6/LECP1/LECPMJ JXCE1/91/P1/D1	14	15	25	30	45	50	55	65
		Horizontal	LECPA	9	10	20	20	40	45	50	60
		Vertical		2	4	7.5	15	10	20	2	23
	Speed [mm/s] Note 2)			10 to 500	5 to 250	12 to 500	6 to 250	16 to 500	8 to 250	20 to 500	10 to 250
	Max. acceleration/deceleration [mm/s²]			3000							
	Positioning repeatability [mm]	Basic type		±0.02							
		High precision type		±0.015							
	Lost motion Note 3) [mm]	Basic type		0.1 or less							
		High precision type		0.05 or less							
	Lead [mm]			10	5	12	6	16	8	20	10
	Impact/Vibration resistance [m/s²] Note 4)			50/20							
	Actuation type			Ball screw							
	Guide type			Linear guide							
	Operating temperature range [°C]			5 to 40							
	Operating humidity range [%RH]			90 or less (No condensation)							
	Cleanliness class Note 5)			ISO Class 4 (ISO 14644-1)							
	Grease	Ball screw /Linear guide portion		Low particle generation grease							
Electric specifications	Motor size			□28		□42		□56.4			
	Motor type			Step motor (Servo/24 VDC)							
	Encoder			Incremental A/B phase (800 pulse/rotation)							
	Rated voltage [V]			24 VDC ±10%							
	Power consumption [W] Note 6)			22		38		50		100	
	Standby power consumption when operating [W] Note 7)			18		16		44		43	
	Max. instantaneous power consumption [W] Note 8)			51		57		123		141	
Lock unit specifications	Type Note 9)			Non-magnetizing lock							
	Holding force [N]			20	39	78	157	108	216	113	225
	Power consumption [W] Note 10)			2.9		5		5		5	
	Rated voltage [V]			24 VDC ±10%							

Note 1) Please consult with SMC for non-standard strokes as they are produced as special orders.
Note 2) Speed changes according to the controller/driver type and work load. Check "Speed–Work Load Graph (Guide)" on pages 39 and 40. Furthermore, if the cable length exceeds 5 m, then it will decrease by up to 10% for each 5 m.
Note 3) A reference value for correcting an error in reciprocal operation.
Note 4) 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.)
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.)
Note 5) The amount of particle generation changes according to the operating conditions and suction flow rate. Refer to the particle generation characteristics for details.
Note 6) The power consumption (including the controller) is for when the actuator is operating.
Note 7) The standby power consumption when operating (including the controller) is for when the actuator is stopped in the set position during the operation.
Note 8) 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 9) With lock only
Note 10) For an actuator with lock, add the power consumption for the lock.

Specifications

Servo Motor (24 VDC)

	Model		11-LEFS16A		11-LEFS25A	
Actuator specifications	Stroke [mm] Note 1)		50 to 500		50 to 600	
	Work load Note 2) [kg]	Horizontal	7	10	11	18
		Vertical	2	4	2.5	5
	Speed [mm/s] Note 2)		1 to 500	1 to 250	2 to 500	1 to 250
	Max. acceleration/deceleration [mm/s²]		3000			
	Positioning repeatability [mm]	Basic type	±0.02			
		High precision type	±0.015			
	Lost motion Note 3) [mm]	Basic type	0.1 or less			
		High precision type	0.05 or less			
	Lead [mm]		10	5	12	6
	Impact/Vibration resistance [m/s²] Note 4)		50/20			
	Actuation type		Ball screw			
	Guide type		Linear guide			
	Operating temperature range [°C]		5 to 40			
	Operating humidity range [%RH]		90 or less (No condensation)			
	Cleanliness class Note 5)		ISO Class 4 (ISO 14644-1)			
	Grease	Ball screw /Linear guide portion	Low particle generation grease			
Electric specifications	Motor size		□28		□42	
	Motor output [W]		30		36	
	Motor type		Servo motor (24 VDC)			
	Encoder		Incremental A/B (800 pulse/rotation)/Z phase			
	Rated voltage [V]		24 VDC ±10%			
	Power consumption [W] Note 6)		63		102	
	Standby power consumption when operating [W] Note 7)		Horizontal 4/Vertical 9		Horizontal 4/Vertical 9	
	Max. instantaneous power consumption [W] Note 8)		70		113	
Lock unit specifications	Type Note 9)		Non-magnetizing lock			
	Holding force [N]		20	39	78	157
	Power consumption [W] Note 10)		2.9		5	
	Rated voltage [V]		24 VDC ±10%			

Note 1) Please consult with SMC for non-standard strokes as they are produced as special orders.
Note 2) Check "Speed–Work Load Graph (Guide)" on page 42 for details. Furthermore, if the cable length exceeds 5 m, then it will decrease by up to 10% for each 5 m.
Note 3) A reference value for correcting an error in reciprocal operation.
Note 4) 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.)
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.)
Note 5) The amount of particle generation changes according to the operating conditions and suction flow rate. Refer to the particle generation characteristics for details.
Note 6) The power consumption (including the controller) is for when the actuator is operating.
Note 7) The standby power consumption when operating (including the controller) is for when the actuator is stopped in the set position during operation.
Note 8) 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 9) With lock only
Note 10) For an actuator with lock, add the power consumption for the lock.

Weight

Series	11-LEFS16									
Stroke [mm]	50	100	150	200	250	300	350	400	450	500
Product weight [kg]	0.83	0.90	0.98	1.05	1.13	1.20	1.28	1.35	1.43	1.50
Additional weight with lock [kg]	0.12									

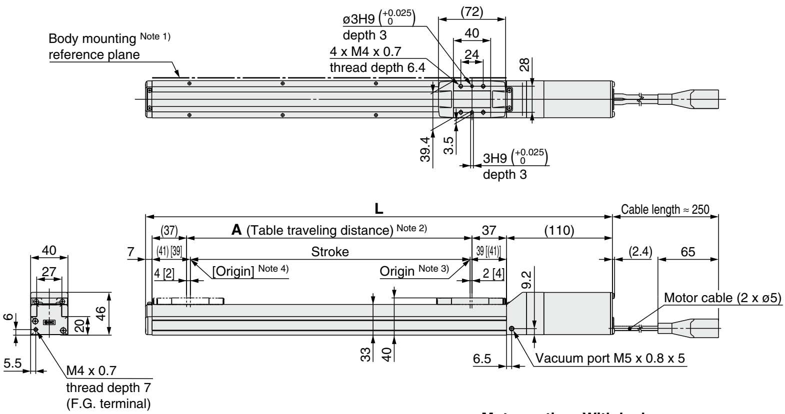
Series	11-LEFS25											
Stroke [mm]	50	100	150	200	250	300	350	400	450	500	550	600
Product weight [kg]	1.70	1.84	1.98	2.12	2.26	2.40	2.54	2.68	2.82	2.96	3.10	3.24
Additional weight with lock [kg]	0.26											

Series	11-LEFS32															
Stroke [mm]	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
Product weight [kg]	3.15	3.35	3.55	3.75	3.95	4.15	4.35	4.55	4.75	4.95	5.15	5.35	5.55	5.75	5.95	6.15
Additional weight with lock [kg]	0.53															

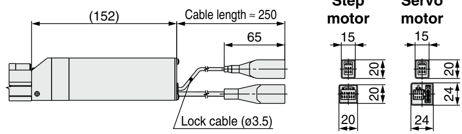
Series	11-LEFS40																	
Stroke [mm]	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
Product weight [kg]	5.37	5.65	5.93	6.21	6.49	6.77	7.15	7.33	7.61	7.89	8.17	8.45	8.75	9.01	9.29	9.57	9.85	10.13
Additional weight with lock [kg]	0.53																	

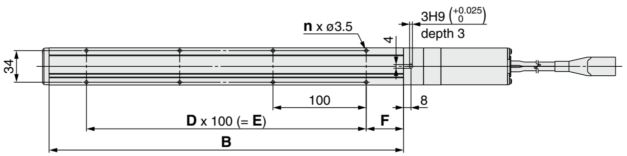
Dimensions: Ball Screw Drive

11-LEFS16

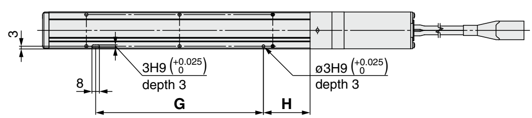


Motor option: With lock





Positioning pin hole Note 5) **(Option): Body bottom**



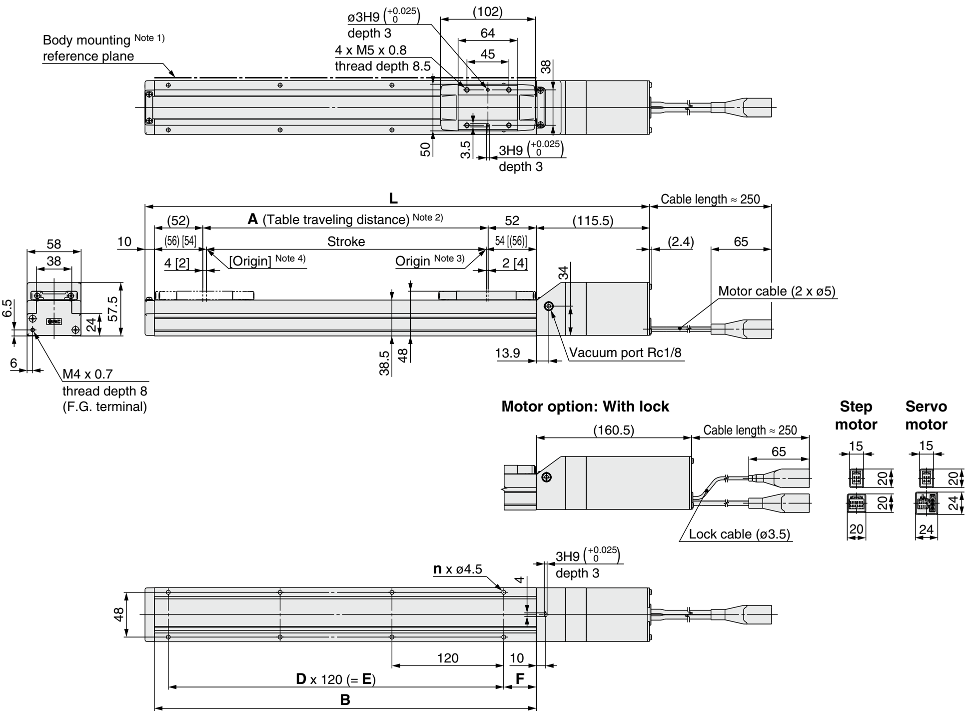
Note 1) When mounting the actuator using the body mounting reference plane, set the height of the opposite surface or pin to be 2 mm or more because of round chamfering. (Recommended height 5 mm)
Note 2) Distance within which the table can move when it returns to origin. Make sure a workpiece mounted on the table does not interfere with the workpieces and facilities around the table.
Note 3) Position after return to origin
Note 4) [ ] for when the direction of return to origin has changed.
Note 5) When using the body bottom positioning pin holes, do not simultaneously use the housing B bottom pin hole.

Dimensions [mm]

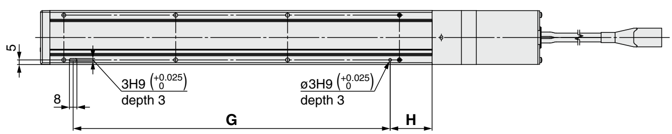
Model	L		A	B	n	D	E	F	G	H
	Without lock	With lock								
11-LEFS16□-50□	247	289	56	130	4	—	—	15	80	25
11-LEFS16□-100□	297	339	106	180	4	—	—		80	50
11-LEFS16□-150□	347	389	156	230	4	—	—		80	50
11-LEFS16□-200□	397	439	206	280	6	2	200		180	50
11-LEFS16□-250□	447	489	256	330	6	2	200		180	50
11-LEFS16□-300□	497	539	306	380	8	3	300	40	280	50
11-LEFS16□-350□	547	589	356	430	8	3	300		280	50
11-LEFS16□-400□	597	639	406	480	10	4	400		380	50
11-LEFS16□-450□	647	689	456	530	10	4	400		380	50
11-LEFS16□-500□	697	739	506	580	12	5	500		480	50

Dimensions: Ball Screw Drive

11-LEFS25



Positioning pin hole Note 5) (Option): Body bottom



Note 1) When mounting the actuator using the body mounting reference plane, set the height of the opposite surface or pin to be 3 mm or more because of round chamfering. (Recommended height 5 mm)
Note 2) Distance within which the table can move when it returns to origin. Make sure a workpiece mounted on the table does not interfere with the workpieces and facilities around the table.
Note 3) Position after return to origin
Note 4) [ ] for when the direction of return to origin has changed.
Note 5) When using the body bottom positioning pin holes, do not simultaneously use the housing B bottom pin hole.

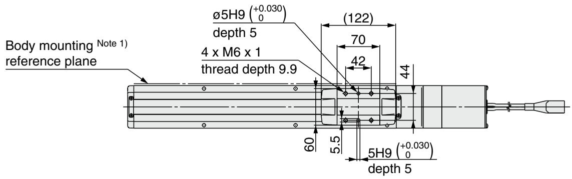
Dimensions

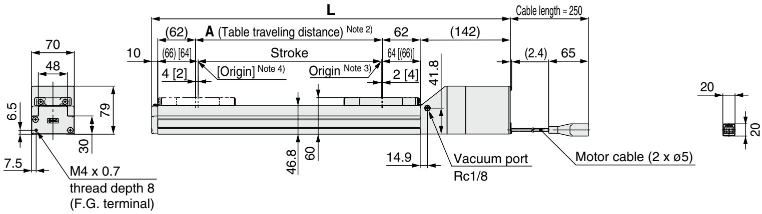
[mm]

Model	L		A	B	n	D	E	F	G	H
	Without lock	With lock								
11-LEFS25□-50□	285.5	330.5	56	160	4	—	—	20	100	30
11-LEFS25□-100□	335.5	380.5	106	210	4	—	—		100	45
11-LEFS25□-150□	385.5	430.5	156	260	4	—	—		100	45
11-LEFS25□-200□	435.5	480.5	206	310	6	2	240		220	45
11-LEFS25□-250□	485.5	530.5	256	360	6	2	240		220	45
11-LEFS25□-300□	535.5	580.5	306	410	8	3	360		340	45
11-LEFS25□-350□	585.5	630.5	356	460	8	3	360	35	340	45
11-LEFS25□-400□	635.5	680.5	406	510	8	3	360		340	45
11-LEFS25□-450□	685.5	730.5	456	560	10	4	480		460	45
11-LEFS25□-500□	735.5	780.5	506	610	10	4	480		460	45
11-LEFS25□-550□	785.5	830.5	556	660	12	5	600		580	45
11-LEFS25□-600□	835.5	880.5	606	710	12	5	600		580	45

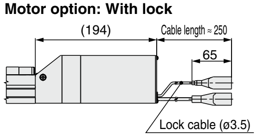
Dimensions: Ball Screw Drive

11-LEFS32

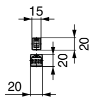


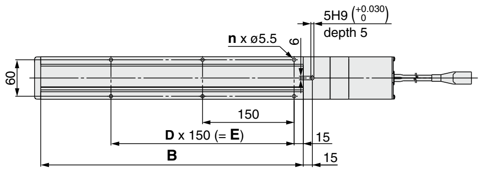


Motor option: With lock

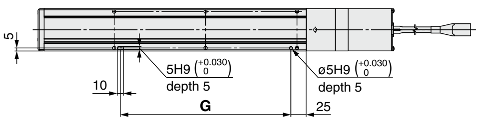


Step motor





Positioning pin hole Note 5) **(Option): Body bottom**



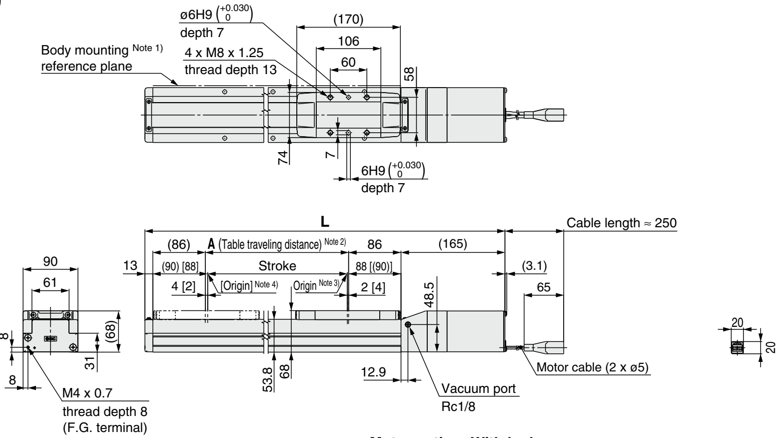
Note 1) When mounting the actuator using the body mounting reference plane, set the height of the opposite surface or pin to be 3 mm or more because of round chamfering. (Recommended height 5 mm)
Note 2) Distance within which the table can move when it returns to origin. Make sure a workpiece mounted on the table does not interfere with the workpieces and facilities around the table.
Note 3) Position after return to origin
Note 4) [ ] for when the direction of return to origin has changed.
Note 5) When using the body bottom positioning pin holes, do not simultaneously use the housing B bottom pin hole.

Dimensions [mm]

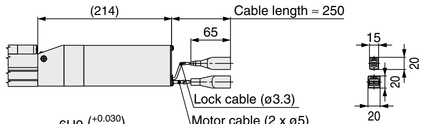
Model	L		A	B	n	D	E	G
	Without lock	With lock						
11-LEFS32□-50□	332	384	56	180	4	—	—	130
11-LEFS32□-100□	382	434	106	230	4	—	—	130
11-LEFS32□-150□	432	484	156	280	4	—	—	130
11-LEFS32□-200□	482	534	206	330	6	2	300	280
11-LEFS32□-250□	532	584	256	380	6	2	300	280
11-LEFS32□-300□	582	634	306	430	6	2	300	280
11-LEFS32□-350□	632	684	356	480	8	3	450	430
11-LEFS32□-400□	682	734	406	530	8	3	450	430
11-LEFS32□-450□	732	784	456	580	8	3	450	430
11-LEFS32□-500□	782	834	506	630	10	4	600	580
11-LEFS32□-550□	832	884	556	680	10	4	600	580
11-LEFS32□-600□	882	934	606	730	10	4	600	580
11-LEFS32□-650□	932	984	656	780	12	5	750	730
11-LEFS32□-700□	982	1034	706	830	12	5	750	730
11-LEFS32□-750□	1032	1084	756	880	12	5	750	730
11-LEFS32□-800□	1082	1134	806	930	14	6	900	880

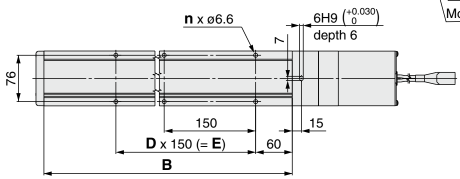
Dimensions: Ball Screw Drive

11-LEFS40

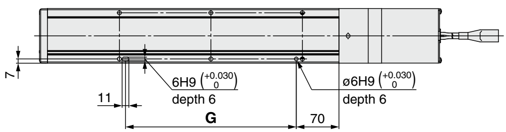


Motor option: With lock





Positioning pin hole Note 5) **(Option): Body bottom**

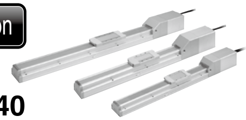


Note 1) When mounting the actuator using the body mounting reference plane, set the height of the opposite surface or pin to be 3 mm or more because of round chamfering. (Recommended height 5 mm)
Note 2) Distance within which the table can move when it returns to origin. Make sure a workpiece mounted on the table does not interfere with the workpieces and facilities around the table.
Note 3) Position after return to origin
Note 4) [ ] for when the direction of return to origin has changed.
Note 5) When using the body bottom positioning pin holes, do not simultaneously use the housing B bottom pin hole.

Dimensions [mm]

Model	L		A	B	n	D	E	G
	Without lock	With lock						
11-LEFS40□-150□	506	555	156	328	4	—	150	130
11-LEFS40□-200□	556	605	206	378	6	2	300	280
11-LEFS40□-250□	606	655	256	428	6	2	300	280
11-LEFS40□-300□	656	705	306	478	6	2	300	280
11-LEFS40□-350□	706	755	356	528	8	3	450	430
11-LEFS40□-400□	756	805	406	578	8	3	450	430
11-LEFS40□-450□	806	855	456	628	8	3	450	430
11-LEFS40□-500□	856	905	506	678	10	4	600	580
11-LEFS40□-550□	906	955	556	728	10	4	600	580
11-LEFS40□-600□	956	1005	606	778	10	4	600	580
11-LEFS40□-650□	1006	1055	656	828	12	5	750	730
11-LEFS40□-700□	1056	1105	706	878	12	5	750	730
11-LEFS40□-750□	1106	1155	756	928	12	5	750	730
11-LEFS40□-800□	1156	1205	806	978	14	6	900	880
11-LEFS40□-850□	1206	1255	856	1028	14	6	900	880
11-LEFS40□-900□	1256	1305	906	1078	14	6	900	880
11-LEFS40□-950□	1306	1355	956	1128	16	7	1050	1030
11-LEFS40□-1000□	1356	1405	1006	1178	16	7	1050	1030

Electric Actuator/Slider Type
Ball Screw Drive Clean Room Specification



11-LEFS Series LEFS25, 32, 40

Refer to page 46 for model selection and page 510 for particle generation characteristics.

RoHS
∗ See the table below

LECY□ Series ▶Page 523-1

How to Order

11 – LEFS H 25 S2 B – 100 ☐ ☐ K – S 2 A1 ☐

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽ ❾ ❿ ⓫ ⓬

Clean Series

11	Vacuum type

❶ Accuracy

Nil	Basic type
H	High precision type

❷ Size

25
32
40

❹ Lead [mm]

Symbol	11-LEFS25	11-LEFS32	11-LEFS40
A	12	16	20
B	6	8	10

❺ Stroke [mm]

50	50
to	to
1000	1000

∗ Refer to the applicable stroke table.

❻ Motor option

Nil	Without option
B	With lock

❸ Motor type

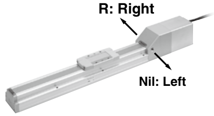
Symbol	Type	Output [W]	Actuator size	Compatible driver	UL-compliant
S2∗1	AC servo motor (Incremental encoder)	100	25	LECSA□-S1	—
S3		200	32	LECSA□-S3	—
S4		400	40	LECSA2-S4	—
S6∗1	AC servo motor (Absolute encoder)	100	25	LECSB□-S5 LECSC□-S5 LECSS□-S5	—
S7		200	32	LECSB□-S7 LECSC□-S7 LECSS□-S7	—
S8		400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

∗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.

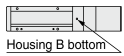
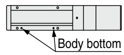
❼ Vacuum port∗

Nil	Left
R	Right
D	Both left and right

∗ Select "D" for the vacuum port for suction of 50 L/min (ANR) or more.



❽ Positioning pin hole

Nil	Housing B bottom∗	
K	Body bottom 2 locations	

∗ Refer to the body mounting example on page 114 for the mounting method.

⓬ I/O cable length [m] Note 4)

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

Note 4) When "Without driver" is selected for driver type, only "Nil: Without cable" can be selected. Refer to page 624 if I/O cable is required. (Options are shown on page 624.)

⓫ Driver type

	Compatible driver	Power supply voltage [V]	Size 25	32	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	●	●	●	—
C1	LECSC1-S□	100 to 120	●	●	—	—
C2	LECSC2-S□	200 to 230	●	●	●	—
S1	LECSS1-S□	100 to 120	●	●	—	—
S2	LECSS2-S□	200 to 230	●	●	●	—
	LECSS2-T□	200 to 240	●	●	●	●

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

❾ Cable type Note 1) Note 2)

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

Note 1) The motor and encoder cables are included. (The lock cable is also included when the motor with lock option is selected.)
Note 2) Standard cable entry direction is "(B) Counter axis side". (Refer to page 623 for details.)

❿ Cable length Note 3)

Nil	Without cable
2	2 m
5	5 m
A	10 m

Note 3) The length of the encoder, motor and lock cables are the same.

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
11-LEFS25	●	●	●	●	●	●	●	●	●	●	●	●	—	—	—	—	—	—	—	—
11-LEFS32	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	—	—	—	—
11-LEFS40	—	—	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

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

Support Guide/*LEFG Series*
A support guide is designed to support workpieces with significant overhang. Page 527

Compatible Driver

Driver type	Pulse input type/ Positioning type 	Pulse input type 	CC-Link direct input type 	SSCNET Ⅲ type 	SSCNET Ⅲ/H type 
Series	LECSA	LECSB	LECSC	LECSS	LECSS-T
Number of point tables	Up to 7	—	Up to 255 (2 stations occupied)	—	—
Pulse input	○	○	—	—	—
Applicable network	—	—	CC-Link	SSCNET Ⅲ	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
Communication function	USB communication	USB communication, RS422 communication	USB communication, RS422 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)
Reference page	Page 613				Page 607

Specifications

11-LEFS25, 32, 40 AC Servo Motor

	Model			11-LEFS25S$^{2}_{6}$/T6		11-LEFS32S$^{3}_{7}$/T7		11-LEFS40S$^{4}_{8}$/T8	
Actuator specifications	**Stroke [mm]** Note 1)			50 to 600		50 to 800		150 to 1000	
	Work load [kg] Note 2)		**Horizontal**	20	20	40	45	50	60
			Vertical	8	15	10	20	15	30
	Max. speed [mm/s] Note 3)	**Stroke range**	**Up to 400**	900	450	1000	500	1000	500
			401 to 500	720	360	1000	500	1000	500
			501 to 600	540	270	800	400	1000	500
			601 to 700	—	—	620	310	940	470
			701 to 800	—	—	500	250	760	380
			801 to 900	—	—	—	—	620	310
			901 to 1000	—	—	—	—	520	260
	Max. acceleration/deceleration [mm/s²]			5000 (Refer to pages 48 to 50 for limit according to work load and duty ratio.)					
	Positioning repeatability [mm]		**Basic type**	±0.02					
			High precision type	±0.01					
	Lost motion [mm] Note 4)		**Basic type**	0.1 or less					
			High precision type	0.05 or less					
	Lead [mm]			12	6	16	8	20	10
	Impact/Vibration resistance [m/s²] Note 5)			50/20					
	Actuation type			Ball screw					
	Guide type			Linear guide					
	Operating temperature range [°C]			5 to 40					
	Operating humidity range [%RH]			90 or less (No condensation)					
	Cleanliness class Note 6)			ISO Class 4 (ISO 14644-1) Class 10 (Fed.Std.209E)					
	Grease	**Ball screw /Linear guide portion**		Low particle generation grease					
Electric specifications	**Motor output/Size**			100 W/□40		200 W/□60		400 W/□60	
	Motor type			AC servo motor (100/200 VAC)					
	Encoder			Motor type S2, S3, S4: Incremental 17-bit encoder (Resolution: 131072 p/rev) Motor type S6, S7, S8: Absolute 18-bit encoder (Resolution: 262144 p/rev) Motor type T6, T7, T8: Absolute encoder (Resolution: 4194304 p/rev)					
	Power consumption [W] Note 7)		**Horizontal**	45		65		210	
			Vertical	145		175		230	
	Standby power consumption when operating [W] Note 8)		**Horizontal**	2		2		2	
			Vertical	8		8		18	
	Max. instantaneous power consumption [W] Note 9)			445		725		1275	
Lock unit specifications	**Type** Note 10)			Non-magnetizing lock					
	Holding force [N]			131	255	197	385	330	660
	Power consumption at 20°C [W] Note 11)			6.3		7.9		7.9	
	Rated voltage [V]			24 VDC$^{0}_{-10\%}$					

Note 1) Please consult with SMC for non-standard strokes as they are produced as special orders.
Note 2) For details, refer to "Speed–Work Load Graph (Guide)" on page 47.
Note 3) The allowable speed changes according to the stroke.
Note 4) A reference value for correcting an error in reciprocal operation.
Note 5) 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.)
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.)
Note 6) The amount of particle generation changes according to the operating conditions and suction flow rate. Refer to the particle generation characteristics for details.
Note 7) The power consumption (including the driver) is for when the actuator is operating.
Note 8) The standby power consumption when operating (including the driver) is for when the actuator is stopped in the set position during the operation.
Note 9) The maximum instantaneous power consumption (including the driver) is for when the actuator is operating.
Note 10) Only when motor option "With lock" is selected.
Note 11) For an actuator with lock, add the power consumption for the lock.

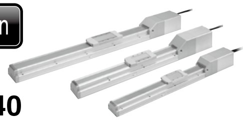
Weight

Series		11-LEFS25S□											
Stroke [mm]		50	100	150	200	250	300	350	400	450	500	550	600
Motor type	**S2**	2.00	2.14	2.28	2.44	2.56	2.69	2.84	2.99	3.12	3.24	3.40	3.54
	S6	2.06	2.20	2.34	2.50	2.62	2.75	2.90	3.05	3.18	3.30	3.46	3.60
	T6	2.04	2.18	2.32	2.48	2.60	2.73	2.88	3.03	3.16	3.28	3.44	3.58
Additional weight with lock [kg]		S2: 0.2/S6: 0.3/T6: 0.3											

Series		11-LEFS32S□															
Stroke [mm]		50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
Motor type	**S3**	3.40	3.60	3.80	4.00	4.20	4.40	4.60	4.80	5.00	5.20	5.40	5.60	5.80	6.00	6.20	6.40
	S7	3.34	3.54	3.74	3.94	4.14	4.34	4.54	4.74	4.94	5.14	5.34	5.54	5.74	5.94	6.14	6.34
	T7	3.31	3.51	3.71	3.91	4.11	4.31	4.51	4.71	4.91	5.11	5.31	5.51	5.71	5.91	6.11	6.31
Additional weight with lock [kg]		S3: 0.4/S7: 0.7/T7: 0.5															

Series		11-LEFS40S□																	
Stroke [mm]		150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
Motor type	**S4**	5.82	6.10	6.38	6.65	6.95	7.25	7.51	7.80	8.07	8.25	8.63	8.90	9.20	9.45	9.76	10.05	10.32	10.60
	S8	5.92	6.20	6.48	6.75	7.05	7.35	7.61	7.90	8.17	8.35	8.73	9.00	9.30	9.55	9.86	10.15	10.42	10.70
	T8	5.91	6.19	6.47	6.74	7.04	7.34	7.60	7.89	8.16	8.34	8.72	8.99	9.29	9.54	9.85	10.14	10.41	10.69
Additional weight with lock [kg]		S4: 0.5/S8: 0.7/T8: 0.5																	

Electric Actuator/Slider Type
Ball Screw Drive Clean Room Specification
11-LEFS Series LEFS25, 32, 40



Refer to page 46 for model selection and page 510 for particle generation characteristics.

CE RoHS

LECS□ Series ▶ Page 522

How to Order

Dimensions are the same as those of the LECS□ series. For details, refer to page 524 and onwards.

11 – LEFS H 25 V7 B – 100 □ □ K – S 3 M2 □

(❶ H, ❷ 25, ❸ V7, ❹ B, ❺ 100, ❻ □, ❼ □, ❽ K, ❾ S, ❿ 3, ⓫ M2, ⓬ □)

Clean Series

11	Vacuum type

❶ Accuracy

Nil	Basic type
H	High precision type

❷ Size

25
32
40

❹ Lead [mm]

Symbol	11-LEFS25	11-LEFS32	11-LEFS40
A	12	16	20
B	6	8	10

❺ Stroke [mm]

50	50
to	to
1000	1000

∗ Refer to the applicable stroke table.

❻ Motor option

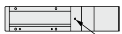
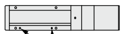
Nil	Without option
B	With lock

❸ Motor type

Symbol	Type	Output [W]	Size	Compatible driver
V6∗	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

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

❽ Positioning pin hole

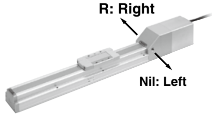
Nil	Housing B bottom∗	 Housing B bottom
K	Body bottom 2 locations	 Body bottom

∗ Refer to the body mounting example on page 114 for the mounting method.

❼ Vacuum port∗

Nil	Left
R	Right
D	Both left and right

∗ Select "D" for the vacuum port for suction of 50 L/min (ANR) or more.



❾ Cable type Note 1) Note 2)

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

Note 1) The motor and encoder cables are included. (The lock cable is also included when the motor with lock option is selected.)
Note 2) Standard cable entry direction is "(B) Counter axis side". (Refer to page 623 for details.)

⓬ I/O cable length [m] Note 4)

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

Note 4) When "Without driver" is selected for driver type, only "Nil: Without cable" can be selected.
Refer to page 624 if I/O cable is required.
(Options are shown on page 624.)

⓫ Driver type

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

❿ Actuator cable length [m]

Nil	Without cable
3	3
5	5
A	10
C	20

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
11-LEFS25	●	●	●	●	●	●	●	●	●	●	●	●	—	—	—	—	—	—	—	—
11-LEFS32	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	—	—	—	—
11-LEFS40	—	—	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

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

Support Guide/*LEFG Series*
A support guide is designed to support workpieces with significant overhang. Page 527

For auto switches, refer to pages 112-1 to 112-3.

Compatible Driver

	MECHATROLINK-II type	MECHATROLINK-III type
Driver 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	Page 628-1	

SMC

Specifications

AC Servo Motor

	Model			11-LEFS25□V6			11-LEFS32□V7			11-LEFS40□V8		
Actuator specifications	**Stroke [mm]** Note 1)			50 to 800			50 to 1000			150 to 1200		
	Work load [kg] Note 2)		**Horizontal**	10	20	20	30	40	45	30	50	60
			Vertical	4	8	15	5	10	20	7	15	30
	Max. speed [mm/s] Note 3)	**Stroke range**	**Up to 400**	1500	900	450	1500	1000	500	1500	1000	500
			401 to 500	1200	720	360	1500	1000	500	1500	1000	500
			501 to 600	900	540	270	1200	800	400	1500	1000	500
			601 to 700	700	420	210	930	620	310	1410	940	470
			701 to 800	550	330	160	750	500	250	1140	760	380
			801 to 900	—	—	—	610	410	200	930	620	310
			901 to 1000	—	—	—	510	340	170	780	520	260
			1001 to 1100	—	—	—	—	—	—	500	440	220
			1101 to 1200	—	—	—	—	—	—	500	380	190
	Max. acceleration/deceleration [mm/s²]			20000 (Refer to pages 48 to 50 for limit according to work load and duty ratio.)								
	Positioning repeatability [mm]		**Basic type**	±0.02								
			High precision type	±0.01								
	Lost motion [mm] Note 4)		**Basic type**	0.1 or less								
			High precision type	0.05 or less								
	Lead [mm]			20	12	6	24	16	8	30	20	10
	Impact/Vibration resistance [m/s²] Note 5)			50/20								
	Actuation type			Ball screw (LEFS□), Ball screw + Belt (LEFS□$^{R}_{L}$)								
	Guide type			Linear guide								
	Operating temperature range [°C]			5 to 40								
	Operating humidity range [%RH]			90 or less (No condensation)								
	Cleanliness class Note 6)			ISO Class 4 (ISO 14644-1) Class 10 (Fed.Std.209E)								
	Grease	**Ball screw /Linear guide portion**		Low particle generation grease								
Electric specifications	**Motor output/Size**			100 W/□40			200 W/□60			400 W/□60		
	Motor type			AC servo motor (200 VAC)								
	Encoder			Absolute 20-bit encoder (Resolution: 1048576 p/rev)								
	Power consumption [W] Note 7)		**Horizontal**	45			65			210		
			Vertical	145			175			230		
	Standby power consumption when operating [W] Note 8)		**Horizontal**	2			2			2		
			Vertical	8			8			18		
	Max. instantaneous power consumption [W] Note 9)			445			725			1275		
Lock unit specifications	**Type** Note 10)			Non-magnetizing lock								
	Holding force [N]			78	131	255	131	197	385	220	330	660
	Power consumption at 20°C [W] Note 11)			5.5			6			6		
	Rated voltage [V]			24 VDC $^{+10\%}_{0}$								

Note 1) Please consult with SMC for non-standard strokes as they are produced as special orders.
Note 2) For details, refer to "Speed–Work Load Graph (Guide)" on page 47.
Note 3) The allowable speed changes according to the stroke.
Note 4) A reference value for correcting an error in reciprocal operation.
Note 5) 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.)
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.)
Note 6) The amount of particle generation changes according to the operating conditions and suction flow rate. Refer to the particle generation characteristics for details.
Note 7) The power consumption (including the driver) is for when the actuator is operating.
Note 8) The standby power consumption when operating (including the driver) is for when the actuator is stopped in the set position during the operation.
Note 9) The maximum instantaneous power consumption (including the driver) is for when the actuator is operating.
Note 10) Only when motor option "With lock" is selected.
Note 11) For an actuator with lock, add the power consumption for the lock.

Weight

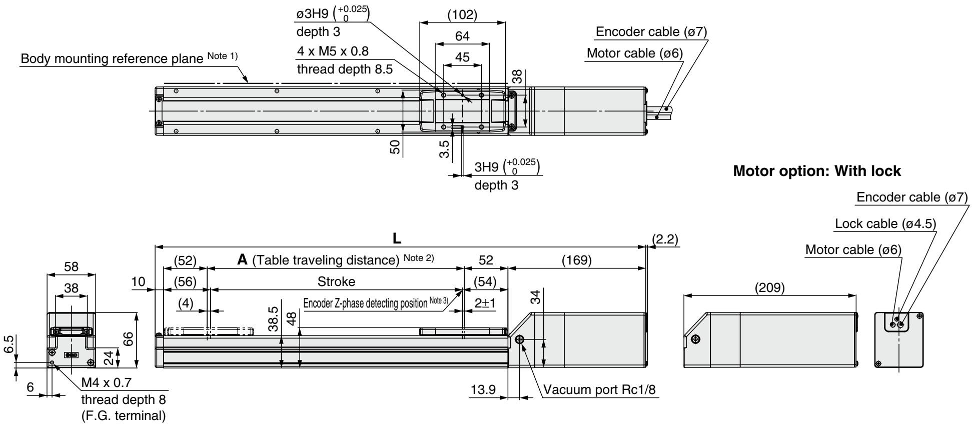
Series	11-LEFS25□V6															
Stroke [mm]	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
Product weight [kg]	2.06	2.20	2.34	2.50	2.62	2.75	2.90	3.05	3.18	3.30	3.46	3.60	3.74	3.88	4.02	4.20
Additional weight with lock [kg]	0.3															

Series	11-LEFS32□V7																			
Stroke [mm]	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
Product weight [kg]	3.40	3.60	3.80	4.00	4.20	4.40	4.60	4.80	5.00	5.20	5.40	5.60	5.80	6.00	6.20	6.40	6.60	6.80	7.00	7.20
Additional weight with lock [kg]	0.7																			

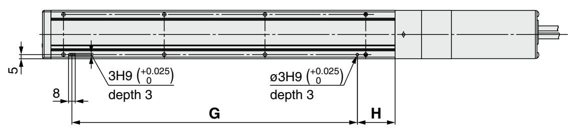
Series	11-LEFS40□V8																			
Stroke [mm]	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1100	1200
Product weight [kg]	5.92	6.20	6.48	6.75	7.05	7.35	7.61	7.90	8.17	8.35	8.73	9.00	9.30	9.55	9.86	10.15	10.42	10.70	11.26	11.82
Additional weight with lock [kg]	0.7																			

Dimensions: Ball Screw Drive

11-LEFS25



Positioning pin hole Note 4) **(Option): Body bottom**



Note 1) When mounting the actuator using the body mounting reference plane, set the height of the opposite surface or pin to be 3 mm or more because of round chamfering. (Recommended height 5 mm)
Note 2) Distance within which the table can move when it returns to origin. Make sure a workpiece mounted on the table does not interfere with the workpieces and facilities around the table.
Note 3) The Z-phase first detecting position from the stroke end of the motor side.
Note 4) When using the body bottom positioning pin holes, do not simultaneously use the housing B bottom pin hole.

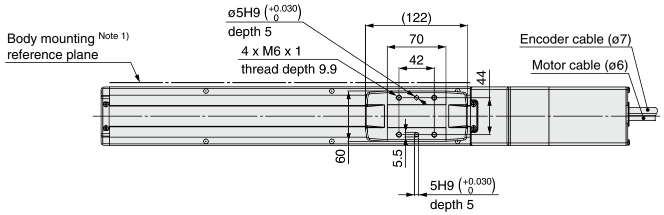
Dimensions

[mm]

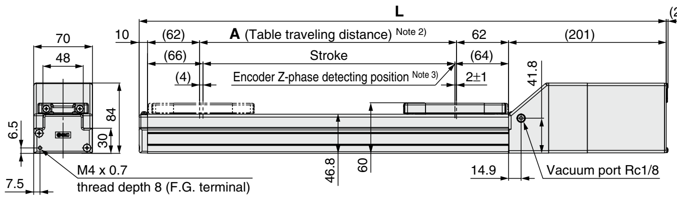
Model	L		A	B	n	D	E	F	G	H
	Without lock	With lock								
11-LEFS25□□-50□	339	379	56	160	4	—	—	20	100	30
11-LEFS25□□-100□	389	429	106	210	4	—	—	35	100	45
11-LEFS25□□-150□	439	479	156	260	4	—	—		100	45
11-LEFS25□□-200□	489	529	206	310	6	2	240		220	45
11-LEFS25□□-250□	539	579	256	360	6	2	240		220	45
11-LEFS25□□-300□	589	629	306	410	8	3	360		340	45
11-LEFS25□□-350□	639	679	356	460	8	3	360		340	45
11-LEFS25□□-400□	689	729	406	510	8	3	360		340	45
11-LEFS25□□-450□	739	779	456	560	10	4	480		460	45
11-LEFS25□□-500□	789	829	506	610	10	4	480		460	45
11-LEFS25□□-550□	839	879	556	660	12	5	600		580	45
11-LEFS25□□-600□	889	929	606	710	12	5	600		580	45

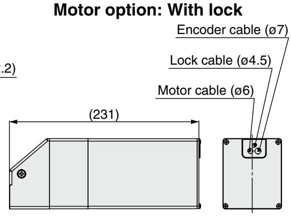
Dimensions: Ball Screw Drive

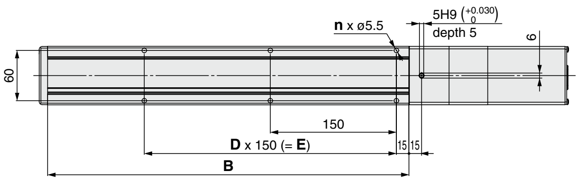
11-LEFS32



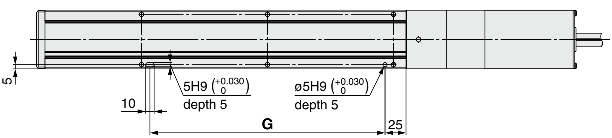
Motor option: With lock







Positioning pin hole Note 4) **(Option): Body bottom**



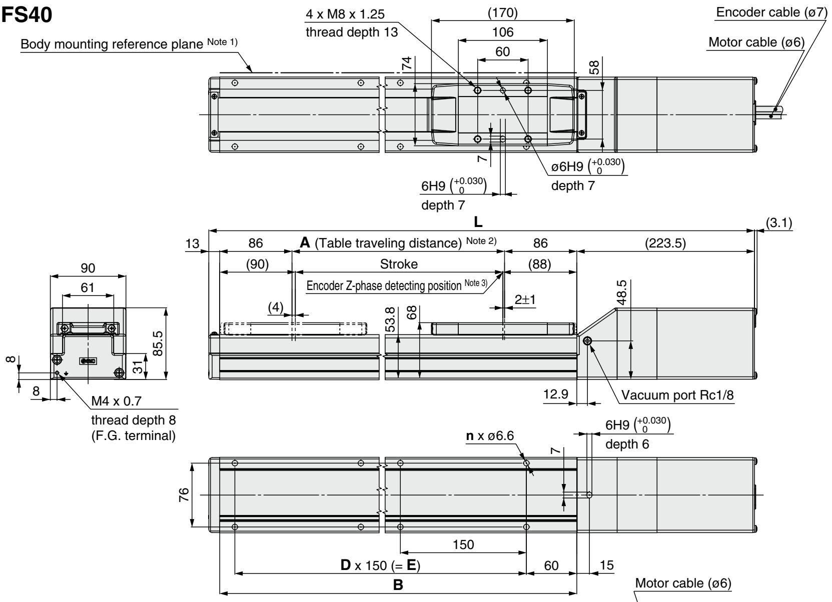
Note 1) When mounting the actuator using the body mounting reference plane, set the height of the opposite surface or pin to be 3 mm or more because of round chamfering. (Recommended height 5 mm)
Note 2) Distance within which the table can move when it returns to origin. Make sure a workpiece mounted on the table does not interfere with the workpieces and facilities around the table.
Note 3) The Z-phase first detecting position from the stroke end of the motor side.
Note 4) When using the body bottom positioning pin holes, do not simultaneously use the housing B bottom pin hole.

Dimensions [mm]

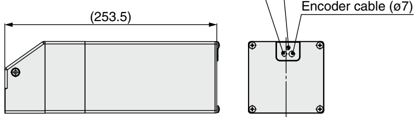
Model	L		A	B	n	D	E	G
	Without lock	With lock						
11-LEFS32□□-50□	391	421	56	180	4	—	—	130
11-LEFS32□□-100□	441	471	106	230	4	—	—	130
11-LEFS32□□-150□	491	521	156	280	4	—	—	130
11-LEFS32□□-200□	541	571	206	330	6	2	300	280
11-LEFS32□□-250□	591	621	256	380	6	2	300	280
11-LEFS32□□-300□	641	671	306	430	6	2	300	280
11-LEFS32□□-350□	691	721	356	480	8	3	450	430
11-LEFS32□□-400□	741	771	406	530	8	3	450	430
11-LEFS32□□-450□	791	821	456	580	8	3	450	430
11-LEFS32□□-500□	841	871	506	630	10	4	600	580
11-LEFS32□□-550□	891	921	556	680	10	4	600	580
11-LEFS32□□-600□	941	971	606	730	10	4	600	580
11-LEFS32□□-650□	991	1021	656	780	12	5	750	730
11-LEFS32□□-700□	1041	1071	706	830	12	5	750	730
11-LEFS32□□-750□	1091	1121	756	880	12	5	750	730
11-LEFS32□□-800□	1141	1171	806	930	14	6	900	880

Dimensions: Ball Screw Drive

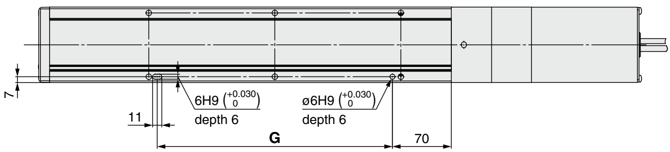
11-LEFS40



Motor option: With lock



Positioning pin hole Note 4) **(Option): Body bottom**



Note 1) When mounting the actuator using the body mounting reference plane, set the height of the opposite surface or pin to be 3 mm or more because of round chamfering. (Recommended height 5 mm)

Note 2) Distance within which the table can move when it returns to origin. Make sure a workpiece mounted on the table does not interfere with the workpieces and facilities around the table.

Note 3) The Z-phase first detecting position from the stroke end of the motor side.

Note 4) When using the body bottom positioning pin holes, do not simultaneously use the housing B bottom pin hole.

Dimensions

[mm]

Model	L		A	B	n	D	E	G
	Without lock	With lock						
11-LEFS40□□-150□	564.5	594.5	156	328	4	—	150	130
11-LEFS40□□-200□	614.5	644.5	206	378	6	2	300	280
11-LEFS40□□-250□	664.5	694.5	256	428	6	2	300	280
11-LEFS40□□-300□	714.5	744.5	306	478	6	2	300	280
11-LEFS40□□-350□	764.5	794.5	356	528	8	3	450	430
11-LEFS40□□-400□	814.5	844.5	406	578	8	3	450	430
11-LEFS40□□-450□	864.5	894.5	456	628	8	3	450	430
11-LEFS40□□-500□	914.5	944.5	506	678	10	4	600	580
11-LEFS40□□-550□	964.5	994.5	556	728	10	4	600	580
11-LEFS40□□-600□	1014.5	1044.5	606	778	10	4	600	580
11-LEFS40□□-650□	1064.5	1094.5	656	828	12	5	750	730
11-LEFS40□□-700□	1114.5	1144.5	706	878	12	5	750	730
11-LEFS40□□-750□	1164.5	1194.5	756	928	12	5	750	730
11-LEFS40□□-800□	1214.5	1244.5	806	978	14	6	900	880
11-LEFS40□□-850□	1264.5	1294.5	856	1028	14	6	900	880
11-LEFS40□□-900□	1314.5	1344.5	906	1078	14	6	900	880
11-LEFS40□□-950□	1364.5	1394.5	956	1128	16	7	1050	1030
11-LEFS40□□-1000□	1414.5	1444.5	1006	1178	16	7	1050	1030

Support Guide

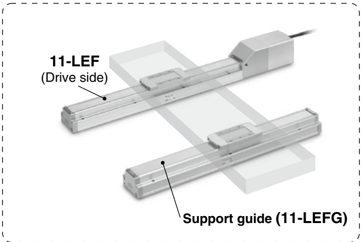
11-LEFG Series 11-LEFG16, 25, 32, 40

RoHS

A support guide is designed to support workpieces with significant overhang.

- As the dimensions are the same as the 11-LEF series body, installation is simple and contributes to a reduction in installation and assembly labor.
- The standard equipped seal bands prevent grease from splashing and external foreign matter from entering.

Application example



How to Order

11 – LEF G [32] – [S] – [200]

- 11: Clean series
- G: Support guide
- 32: ❶
- S: ❷
- 200: ❸

❶ Size

16
25
32
40

❷ Type of mounting pitch

Symbol	11-LEFG16	11-LEFG25	11-LEFG32	11-LEFG40	Note
S	●	●	●	●	Ball screw drive Step motor/Servo motor (24 VDC)/AC servo motor

❸ Stroke [mm]

50	50
to	to
1000	1000

Applicable Stroke Table

Ball Screw Drive: S Step Motor (Servo/24 VDC) Servo Motor (24 VDC) AC Servo Motor

Model \ Stroke [mm]	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
11-LEFG16-S	●	●	●	●	●	●	●	●	●	●	—	—	—	—	—	—	—	—	—	—
11-LEFG25-S	●	●	●	●	●	●	●	●	●	●	●	●	—	—	—	—	—	—	—	—
11-LEFG32-S	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	—	—	—	—
11-LEFG40-S	—	—	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

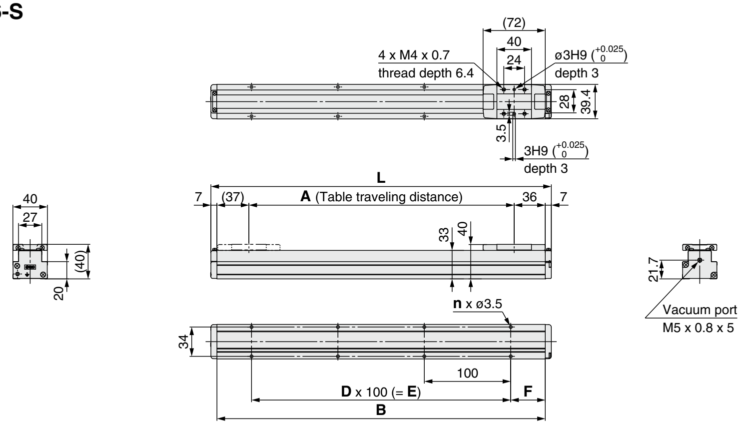
Weight

Ball Screw Drive: S Step Motor (Servo/24 VDC) Servo Motor (24 VDC) AC Servo Motor

Model \ Stroke [mm]	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
11-LEFG16-S	0.25	0.31	0.37	0.43	0.49	0.55	0.61	0.67	0.73	0.79	—	—	—	—	—	—	—	—	—	—
11-LEFG25-S	0.56	0.67	0.78	0.89	1.00	1.11	1.22	1.33	1.44	1.55	1.66	1.77	—	—	—	—	—	—	—	—
11-LEFG32-S	0.92	1.08	1.23	1.4	1.56	1.72	1.88	2.04	2.20	2.36	2.52	2.88	2.84	3.00	3.16	3.22	—	—	—	—
11-LEFG40-S	—	—	2.07	2.29	2.51	2.72	2.94	3.15	3.37	3.58	3.80	4.01	4.23	4.44	4.66	4.87	5.09	5.30	5.52	5.73

Dimensions: Ball Screw Drive

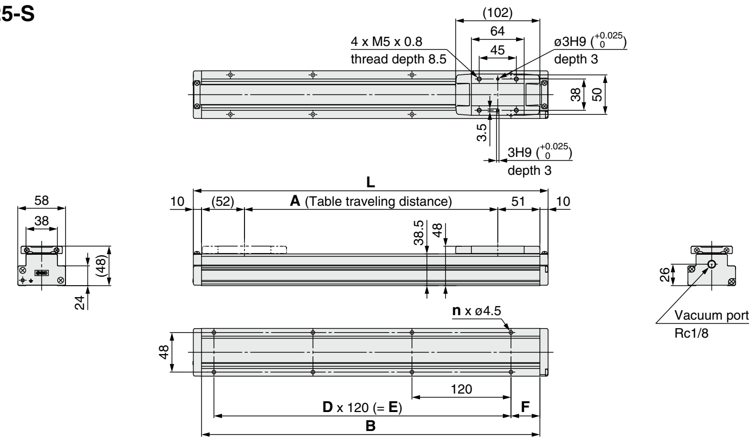
11-LEFG16-S



Dimensions [mm]

Model	L	A	B	n	D	E	F
11-LEFG16-S-50	144	57	130	4	—	—	15
11-LEFG16-S-100	194	107	180				40
11-LEFG16-S-150	244	157	230				
11-LEFG16-S-200	294	207	280	6	2	200	
11-LEFG16-S-250	344	257	330				
11-LEFG16-S-300	394	307	380	8	3	300	
11-LEFG16-S-350	444	357	430				
11-LEFG16-S-400	494	407	480	10	4	400	
11-LEFG16-S-450	544	457	530				
11-LEFG16-S-500	594	507	580	12	5	500	

11-LEFG25-S



Dimensions [mm]

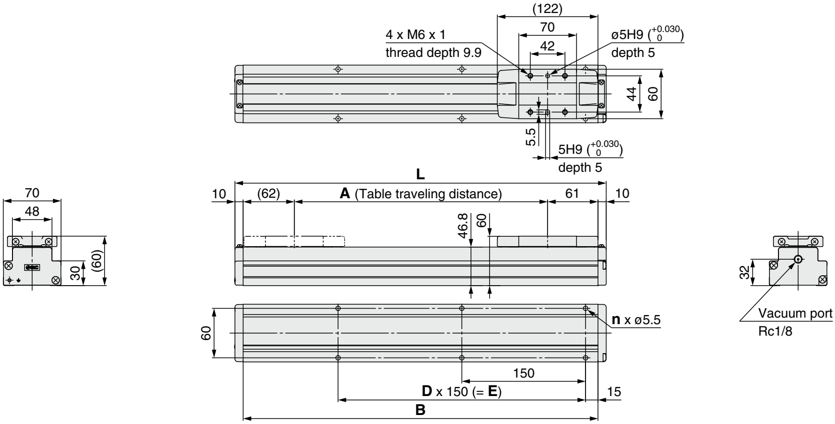
Model	L	A	B	n	D	E	F
11-LEFG25-S-50	180	57	160	4	—	—	20
11-LEFG25-S-100	230	107	210				35
11-LEFG25-S-150	280	157	260				
11-LEFG25-S-200	330	207	310	6	2	240	
11-LEFG25-S-250	380	257	360				
11-LEFG25-S-300	430	307	410	8	3	360	
11-LEFG25-S-350	480	357	460				
11-LEFG25-S-400	530	407	510				

Dimensions [mm]

Model	L	A	B	n	D	E	F
11-LEFG25-S-450	580	457	560	10	4	480	35
11-LEFG25-S-500	630	507	610				
11-LEFG25-S-550	680	557	660	12	5	600	
11-LEFG25-S-600	730	607	710				

Dimensions: Ball Screw Drive

11-LEFG32-S



Dimensions [mm]

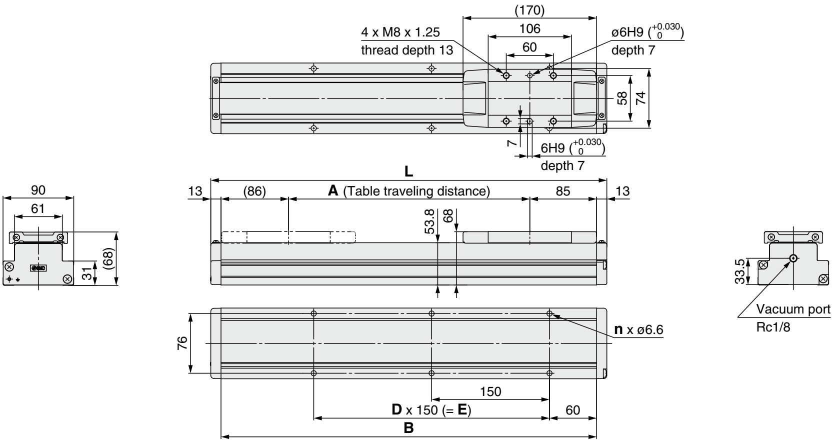
Model	L	A	B	n	D	E
11-LEFG32-S-50	200	57	180			
11-LEFG32-S-100	250	107	230	4	—	—
11-LEFG32-S-150	300	157	280			
11-LEFG32-S-200	350	207	330			
11-LEFG32-S-250	400	257	380	6	2	300
11-LEFG32-S-300	450	307	430			
11-LEFG32-S-350	500	357	480			
11-LEFG32-S-400	550	407	530	8	3	450
11-LEFG32-S-450	600	457	580			

Dimensions [mm]

Model	L	A	B	n	D	E
11-LEFG32-S-500	650	507	630			
11-LEFG32-S-550	700	557	680	10	4	600
11-LEFG32-S-600	750	607	730			
11-LEFG32-S-650	800	657	780			
11-LEFG32-S-700	850	707	830	12	5	750
11-LEFG32-S-750	900	757	880			
11-LEFG32-S-800	950	807	930	14	6	900

Dimensions: Ball Screw Drive

11-LEFG40-S



Dimensions [mm]

Model	L	A	B	n	D	E
11-LEFG40-S-150	354	157	328	4	—	150
11-LEFG40-S-200	404	207	378	6	2	300
11-LEFG40-S-250	454	257	428			
11-LEFG40-S-300	504	307	478			
11-LEFG40-S-350	554	357	528	8	3	450
11-LEFG40-S-400	604	407	578			
11-LEFG40-S-450	654	457	628			
11-LEFG40-S-500	704	507	678	10	4	600
11-LEFG40-S-550	754	557	728			
11-LEFG40-S-600	804	607	778			

Dimensions [mm]

Model	L	A	B	n	D	E
11-LEFG40-S-650	854	657	828	12	5	750
11-LEFG40-S-700	904	707	878			
11-LEFG40-S-750	954	757	928			
11-LEFG40-S-800	1004	807	978	14	6	900
11-LEFG40-S-850	1054	857	1028			
11-LEFG40-S-900	1104	907	1078			
11-LEFG40-S-950	1154	957	1128	16	7	1050
11-LEFG40-S-1000	1204	1007	1178			

Particle Generation Characteristics

11-LEJS Series ▶ Page 533

Particle Generation Measuring Method

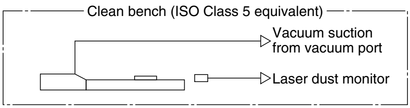
The particle generation data for 11-LEJS series are measured in the following test method.

■ Test Method (Example)

Operate the specimen that is placed in an ISO Class 5 equivalent clean bench, and measure the changes of the particle concentration over time until the number of cycles reaches the specified point.

■ Measuring Conditions

Measuring instrument	Description	Laser dust monitor (Automatic particle counter by lightscattering method)
	Minimum measurable particle diameter	0.1 μm
	Suction flow rate	28.3 L/min (ANR)
Setting conditions	Sampling time	5 min
	Interval time	55 min
	Sampling air flow	141.5 L (ANR)



Particle generation measuring circuit

■ Test Conditions

Size	Speed [mm/s]	Model	Workpiece mass [kg]	Acceleration [mm/s²]	Duty ratio [%]
40	1200	**11-LEJS40□A-200**	4	13000	100
	600	**11-LEJS40□B-200**		10000	
63	1200	**11-LEJS63□A-300**		13000	
	600	**11-LEJS63□B-300**		10000	

∗ Mounting position: Horizontal

■ Evaluation Method

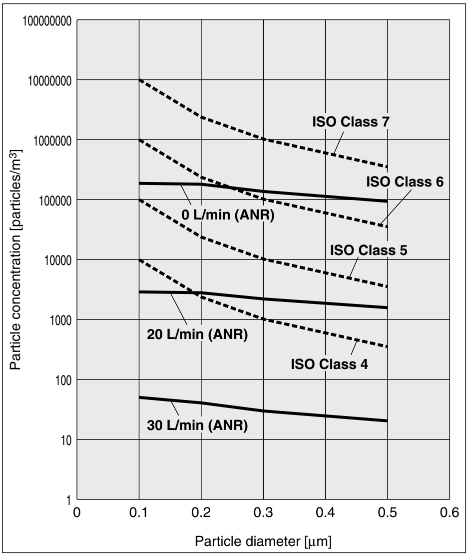
To obtain the measured values of particle concentration, the accumulated value Note 1) of particles captured every 5 minutes, by the laser dust monitor, is converted into the particle concentration in every 1 m^3.
When determining particle generation grades, the 95% upper confidence limit of the average particle concentration (average value), when each specimen is operated at a specified number of cycles Note 2) is considered.
The plots in the graphs indicate the 95% upper confidence limit of the average particle concentration of particles with a diameter within the horizontal axis range.

Note 1) Sampling air flow rate: Number of particles contained in 141.5 L (ANR) of air
Note 2) Actuator: 1 million cycles
Note 3) The particle generation characteristics (Page 532) provide a guide for selection but is not guaranteed.

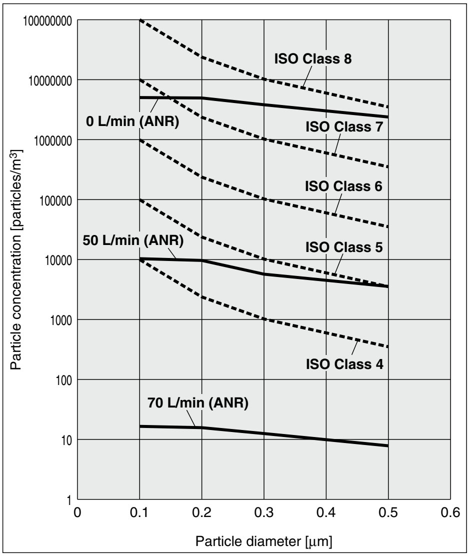
Particle Generation Characteristics

11-LEJS40/Ball Screw Drive

Speed 600 mm/s

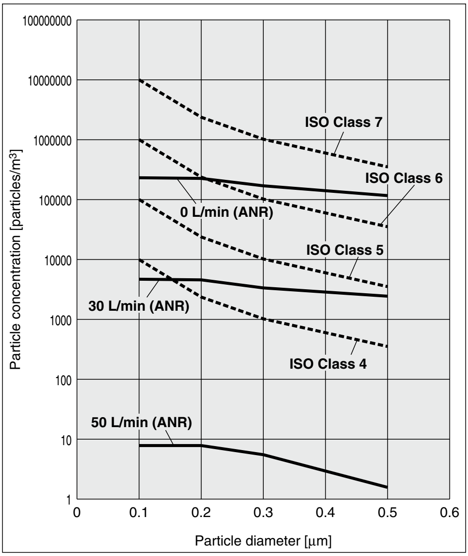


Speed 1200 mm/s

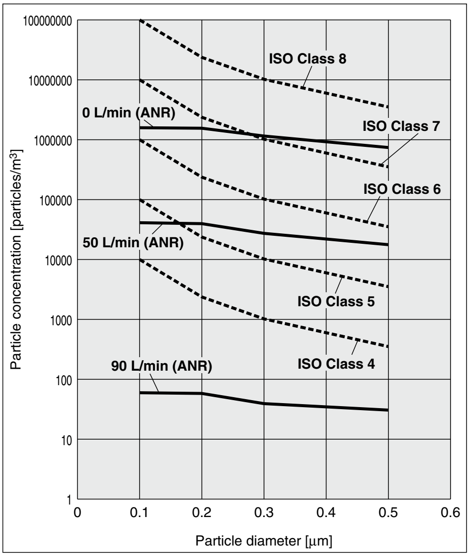


11-LEJS63/Ball Screw Drive

Speed 600 mm/s



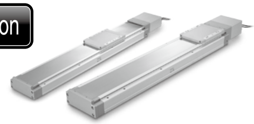
Speed 1200 mm/s



Electric Actuator/High Rigidity Slider Type Ball Screw Drive

Clean Room Specification

11-LEJS Series LEJS40, 63



Refer to page 120 for model selection and page 531 for particle generation characteristics.

CE cULus RoHS
∗ See the table below

LECY□ Series ▶ Page 534-1

How to Order

11 − LEJS H 40 S2 A − 500 ❻ ❼ − ❽ ❾ ❿ ⓫

Clean series (11) · ❶ H · ❷ 40 · ❸ S2 · ❹ A · ❺ 500 · ❻ · ❼ · ❽ · ❾ · ❿ · ⓫

Clean series

11	Vacuum type

❶ Accuracy

Nil	Basic type
H	High precision type

❷ Size

40
63

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	AC servo motor (Absolute encoder)	100	40	LECSS2-T5	●
T7		200	63	LECSS2-T7	

∗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.

❹ Lead [mm]

Symbol	LEJS40	LEJS63
A	16	20
B	8	10

❺ Stroke [mm]*3

200
to
1500

∗3 Refer to the applicable stroke table for details.

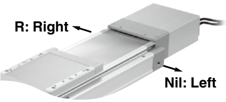
❻ Motor option

Nil	Without option
B	With lock

❼ Vacuum port*5

Nil	Left
R	Right
D	Both left and right

∗5 Select “D” for the vacuum port for suction of 50 L/min (ANR) or more.



❽ Cable type*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 also included when the motor with lock option is selected.)
∗7 Standard cable entry direction is “(A) Axis side”.

❾ Cable length [m]*6, *9

Nil	Without cable
2	2 m
5	5 m
A	10 m

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

❿ Driver type*5

	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	—
C1	LECSC1-S□	100 to 120	—
C2	LECSC2-S□	200 to 230	—
S1	LECSS1-S□	100 to 120	—
S2	LECSS2-S□	200 to 230	—
	LECSS2-T□	200 to 240	●

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

⓫ 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 page 624 if I/O cable is required. (Options are shown on page 624.)

Applicable Stroke Table*4

●: Standard

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

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

For auto switches, refer to pages 142 to 144.

Compatible Driver

Driver type	Pulse input type/ Positioning type 	Pulse input type 	CC-Link direct input type 	SSCNET Ⅲ type 	SSCNET Ⅲ/H type 
Series	LECSA	LECSB	LECSC	LECSS	LECSS-T
Number of point tables	Up to 7	—	Up to 255	—	—
Pulse input	○	○	—	—	—
Applicable network	—	—	CC-Link	SSCNET Ⅲ	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
Communication function	USB communication	USB communication, RS422 communication	USB communication, RS422 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)
Reference page	Page 613				Page 607

Specifications

11-LEJS40, 63 AC Servo Motor

Model				11-LEJS40S^{2}_{6}/T6		11-LEJS63S^{3}_{7}/T7	
Actuator specifications	Stroke [mm] Note 1)			200, 300, 400, 500, 600, 700, 800 900, 1000, 1200		300, 400, 500, 600, 700, 800, 900 1000, 1200, 1500	
	Work load [kg] Note 2)		Horizontal	30	55	45	85
			Vertical	5	10	10	20
	Speed Note 3) [mm/s]	Stroke range	Up to 500	1200	600	1200	600
			501 to 600	1050	520	1200	600
			601 to 700	780	390	1200	600
			701 to 800	600	300	930	460
			801 to 900	480	240	740	370
			901 to 1000	390	190	600	300
			1001 to 1100	320	160	500	250
			1101 to 1200	270	130	420	210
			1201 to 1300	—	—	360	180
			1301 to 1400	—	—	310	150
			1401 to 1500	—	—	270	130
	Max. acceleration/deceleration [mm/s²]			20000 (Refer to pages 124 and 125 for limit according to work load and duty ratio.)			
	Positioning repeatability [mm]		Basic type	±0.02			
			High precision type	±0.01			
	Lost motion [mm] Note 4)		Basic type	0.1 or less			
			High precision type	0.05 or less			
	Lead [mm]			16	8	20	10
	Impact/Vibration resistance [m/s²] Note 5)			50/20			
	Actuation type			Ball screw			
	Guide type			Linear guide			
	Grease	Ball screw/Linear guide portion		Low particle generation grease			
	Cleanliness class Note 6)			ISO Class 4 (ISO14644-1)			
	Allowable external force [N]			20			
	Operating temperature range [°C]			5 to 40			
	Operating humidity range [%RH]			90 or less (No condensation)			
	Regeneration option			May be required depending on speed and work load. (Refer to page 121.)			
Electric specifications	Motor output [W]/Size [mm]			100/□40		200/□60	
	Motor type			AC servo motor (100/200 VAC)			
	Encoder			Motor type S2, S3: Incremental 17-bit encoder (Resolution: 131072 p/rev) Motor type S6, S7: Absolute 18-bit encoder (Resolution: 262144 p/rev) Motor type T6, T7: Absolute 22-bit encoder (Resolution: 4194304 p/rev)			
	Power consumption [W] Note 7)		Horizontal	65		80	
			Vertical	165		235	
	Standby power consumption when operating [W] Note 8)		Horizontal	2		2	
			Vertical	10		12	
	Max. instantaneous power consumption [W] Note 9)			445		725	
Lock unit specifications	Type Note 10)			Non-magnetizing lock			
	Holding force [N]			101	203	330	660
	Power consumption [W] at 20°C Note 11)			6.3		7.9	
	Rated voltage [V]			24 VDC $^{0}_{-10\%}$			

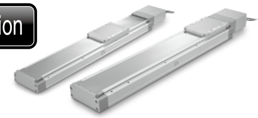
Note 1) Please consult with SMC for non-standard strokes as they are produced as special orders.
Note 2) Refer to "Speed–Work Load Graph (Guide)" on page 121 for details.
Note 3) The allowable speed changes according to the stroke.
Note 4) A reference value for correcting an error in reciprocal operation.
Note 5) 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.)
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.)
Note 6) The amount of particle generation changes according to the operating conditions and suction flow rate. Refer to the particle generation characteristics for details.
Note 7) The power consumption (including the driver) is for when the actuator is operating.
Note 8) The standby power consumption when operating (including the driver) is for when the actuator is stopped in the set position during the operation.
Note 9) The maximum instantaneous power consumption (including the driver) is for when the actuator is operating. This value can be used for the selection of the power supply.
Note 10) Only when motor option "With lock" is selected.
Note 11) For an actuator with lock, add the power consumption for the lock.
Note 12) Sensor magnet position is located in the table center.
For detailed dimensions, refer to "Auto Switch Mounting Position" on page 142.
Note 13) Do not allow collisions at either end of the table traveling distance. Additionally, when running the positioning operation, do not set within 2 mm of both ends.
Note 14) For the manufacture of intermediate strokes, please contact SMC. (11-LEJS40/Manufacturable stroke range: 200 to 1200 mm, 11-LEJS63/Manufacturable stroke range: 300 to 1500 mm)

Weight

Model	11-LEJS40									
Stroke [mm]	200	300	400	500	600	700	800	900	1000	1200
Product weight [kg]	5.6	6.4	7.1	7.9	8.7	9.4	10.2	11.0	11.7	13.3
Additional weight with lock [kg]	S2: 0.2/S6: 0.3/T6: 0.2									

Model	11-LEJS63									
Stroke [mm]	300	400	500	600	700	800	900	1000	1200	1500
Product weight [kg]	11.4	12.7	13.9	15.2	16.4	17.7	18.9	20.1	22.6	26.4
Additional weight with lock [kg]	S3: 0.4/S7: 0.7/T7: 0.4									

Electric Actuator/High Rigidity Slider Type Ball Screw Drive Clean Room Specification



11-LEJS Series LEJS40, 63

Refer to page 120 for model selection and page 531 for particle generation characteristics.

LECS□ Series▶Page 533

How to Order

Dimensions are the same as those of the LECS□ series. For details, refer to page 535 and onwards.

11 – LEJS H 40 V6 A – 500 □ □ – □ □ □ □

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽ ❾ ❿ ⓫

Clean series

11	Vacuum type

❶ Accuracy

Nil	Basic type
H	High precision type

❷ Size

40
63

❸ Motor type *1

Symbol	Type	Output [W]	Actuator size	Compatible*2 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.
*2 For details of the driver, refer to page 607.

❹ Lead [mm]

Symbol	LEJS40	LEJS63
A	16	20
B	8	10

❺ Stroke [mm]*3

200
to
1500

*3 Refer to the applicable stroke table for details.

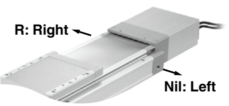
❻ Motor option

Nil	Without option
B	With lock

❼ Vacuum port*5

Nil	Left
R	Right
D	Both left and right

*5 Select "D" for the vacuum port for suction of 50 L/min (ANR) or more.



❽ Cable type*6, *7, *8

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

*6 When the driver type is selected, the cable is included. Select cable type and cable length.
Example)
S2S2: Standard cable (2 m) + Driver (LECSS2)
S2: Standard cable (2 m)
Nil: Without cable and driver
*7 The motor and encoder cables are included. (The lock cable is also included when the motor with lock option is selected.)
*8 Standard cable entry direction is "(A) Axis side".

❾ Cable length [m]*6, *9

Nil	Without cable
3	3
5	5
A	10
C	20

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

❿ Driver type*6

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

⓫ 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 page 624 if I/O cable is required.
(Options are shown on page 624.)

Applicable Stroke Table*4

●: Standard

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

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

For auto switches, refer to pages 142 to 144.

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	Page 628-1	

Specifications

AC Servo Motor (100/200 W)

	Model		11-LEJS40V6		11-LEJS63V7	
Actuator specifications	**Stroke [mm]** Note 1)		200, 300, 400, 500, 600, 700, 800 900, 1000, 1200		300, 400, 500, 600, 700, 800, 900 1000, 1200, 1500	
	Work load [kg] Note 2)	**Horizontal**	30	55	45	85
		Vertical	5	10	10	20
	Speed Note 3) **[mm/s]**	**Stroke range** **Up to 500**	1200	600	1200	600
		501 to 600	1050	520	1200	600
		601 to 700	780	390	1200	600
		701 to 800	600	300	930	460
		801 to 900	480	240	740	370
		901 to 1000	390	190	600	300
		1001 to 1100	320	160	500	250
		1101 to 1200	270	130	420	210
		1201 to 1300	—	—	360	180
		1301 to 1400	—	—	310	150
		1401 to 1500	—	—	270	130
	Max. acceleration/deceleration [mm/s²]		20000 (Refer to pages 124 and 125 for limit according to work load and duty ratio.)			
	Positioning repeatability [mm]	**Basic type**	±0.02			
		High precision type	±0.01			
	Lost motion [mm] Note 4)	**Basic type**	0.1 or less			
		High precision type	0.05 or less			
	Lead [mm]		16	8	20	10
	Impact/Vibration resistance [m/s²] Note 5)		50/20			
	Actuation type		Ball screw			
	Guide type		Linear guide			
	Grease	**Ball screw/Linear guide portion**	Low particle generation grease			
	Cleanliness class Note 6)		ISO Class 4 (ISO14644-1)			
	Operating temperature range [°C]		5 to 40			
	Operating humidity range [%RH]		90 or less (No condensation)			
	Regenerative resistor		May be required depending on speed and work load. (Refer to page 131-2.)			
Electric specifications	**Motor output [W]/Size [mm]**		100/□40		200/□60	
	Motor type		AC servo motor (200 VAC)			
	Encoder		Absolute 20-bit encoder (Resolution: 1048576 p/rev)			
	Power consumption [W] Note 7)	**Horizontal**	65		80	
		Vertical	165		235	
	Standby power consumption when operating [W] Note 8)	**Horizontal**	2		2	
		Vertical	10		12	
	Max. instantaneous power consumption [W] Note 9)		445		725	
Lock unit specifications	**Type** Note 10)		Non-magnetizing lock			
	Holding force [N]		101	202	162	324
	Power consumption at 20°C [W] Note 11)		5.5		6	
	Rated voltage [V]		$24\ VDC^{+10\%}_{0}$			

Note 1) Please consult with SMC for non-standard strokes as they are produced as special orders.
Note 2) Refer to “Speed–Work Load Graph (Guide)” on page 131-2 for details.
Note 3) The allowable speed changes according to the stroke.
Note 4) A reference value for correcting an error in reciprocal operation.
Note 5) 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.)
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.)
Note 6) The amount of particle generation changes according to the operating conditions and suction flow rate. Refer to the particle generation characteristics for details.
Note 7) The power consumption (including the driver) is for when the actuator is operating.
Note 8) The standby power consumption when operating (including the driver) is for when the actuator is stopped in the set position during the operation.
Note 9) The maximum instantaneous power consumption (including the driver) is for when the actuator is operating. This value can be used for the selection of the power supply.
Note 10) Only when motor option “With lock” is selected.
Note 11) For an actuator with lock, add the power consumption for the lock.
Note 12) Sensor magnet position is located in the table center.
For detailed dimensions, refer to “Auto Switch Mounting Position”.
Note 13) Do not allow collisions at either end of the table traveling distance. Additionally, when running the positioning operation, do not set within 2 mm of both ends.
Note 14) For the manufacture of intermediate strokes, please contact SMC. (11-LEJS40/Manufacturable stroke range: 200 to 1200 mm, 11-LEJS63/Manufacturable stroke range: 300 to 1500 mm)

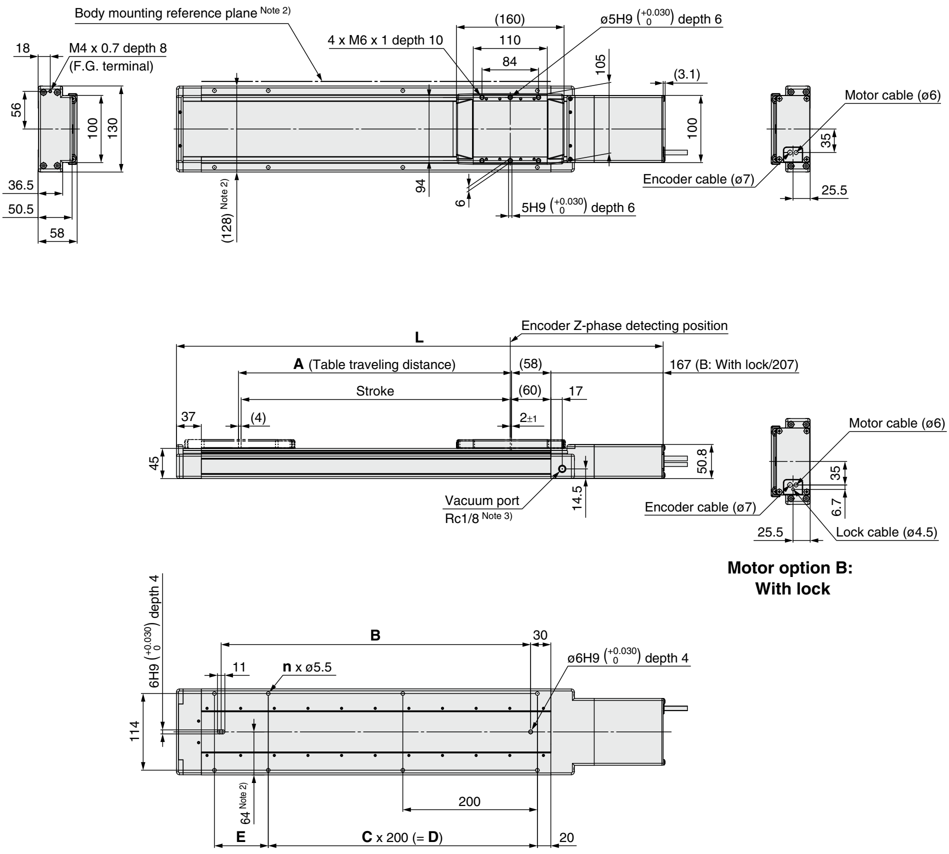
Weight

Model	11-LEJS40									
Stroke [mm]	200	300	400	500	600	700	800	900	1000	1200
Product weight [kg]	5.6	6.4	7.1	7.9	8.7	9.4	10.2	11.0	11.7	13.3
Additional weight with lock [kg]	0.3 (Absolute encoder)									

Model	11-LEJS63									
Stroke [mm]	300	400	500	600	700	800	900	1000	1200	1500
Product weight [kg]	11.4	12.7	13.9	15.2	16.4	17.7	18.9	20.1	22.6	26.4
Additional weight with lock [kg]	0.7 (Absolute encoder)									

Dimensions: Ball Screw Drive

11-LEJS40



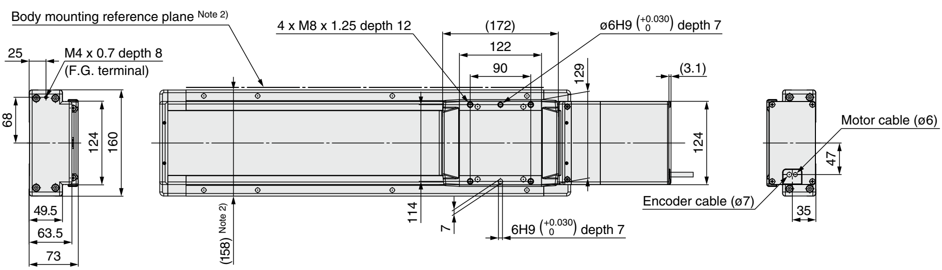
Note 1) Please consult with SMC for adjusting the Z-phase detecting position at the stroke end of the end side.
Note 2) When mounting the actuator using the body mounting reference plane, use a pin. Set the height of the pin to be 5 mm or more because of round chamfering. (Recommended height 6 mm)
Note 3) This drawing shows the left type.
Note 4) The amount of particle generation changes according to the operating conditions and suction flow rate.

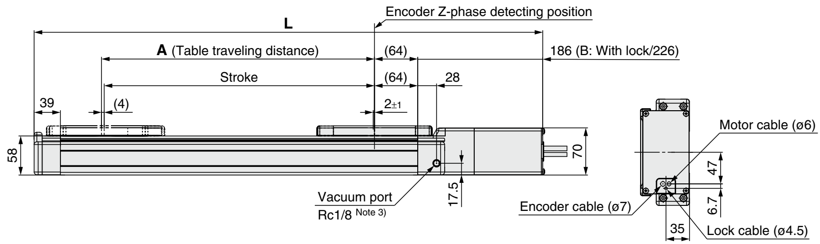
[mm]

Model	L		A	B	n	C	D	E
	Without lock	With lock						
11-LEJS40□□□-200□□-□□□□	523.5	563.5	206	260	6	1	200	80
11-LEJS40□□□-300□□-□□□□	623.5	663.5	306	360	6	1	200	180
11-LEJS40□□□-400□□-□□□□	723.5	763.5	406	460	8	2	400	80
11-LEJS40□□□-500□□-□□□□	823.5	863.5	506	560	8	2	400	180
11-LEJS40□□□-600□□-□□□□	923.5	963.5	606	660	10	3	600	80
11-LEJS40□□□-700□□-□□□□	1023.5	1063.5	706	760	10	3	600	180
11-LEJS40□□□-800□□-□□□□	1123.5	1163.5	806	860	12	4	800	80
11-LEJS40□□□-900□□-□□□□	1223.5	1263.5	906	960	12	4	800	180
11-LEJS40□□□-1000□□-□□□□	1323.5	1363.5	1006	1060	14	5	1000	80
11-LEJS40□□□-1200□□-□□□□	1523.5	1563.5	1206	1260	16	6	1200	80

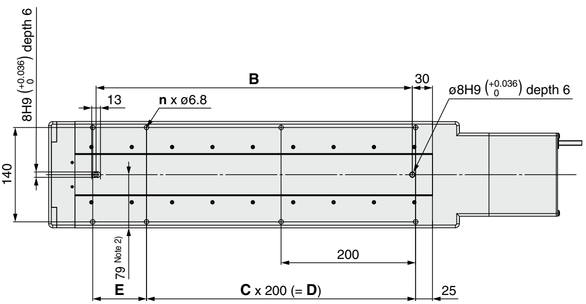
Dimensions: Ball Screw Drive

11-LEJS63





Motor option B: With lock



Note 1) Please consult with SMC for adjusting the Z-phase detecting position at the stroke end of the end side.
Note 2) When mounting the actuator using the body mounting reference plane, use a pin. Set the height of the pin to be 5 mm or more because of round chamfering. (Recommended height 6 mm)
Note 3) This drawing shows the left type.
Note 4) The amount of particle generation changes according to the operating conditions and suction flow rate.

[mm]

Model	L		A	B	n	C	D	E
	Without lock	With lock						
11-LEJS63□□□-300□□-□□□□	656.5	696.5	306	370	6	1	200	180
11-LEJS63□□□-400□□-□□□□	756.5	796.5	406	470	8	2	400	80
11-LEJS63□□□-500□□-□□□□	856.5	896.5	506	570	8	2	400	180
11-LEJS63□□□-600□□-□□□□	956.5	996.5	606	670	10	3	600	80
11-LEJS63□□□-700□□-□□□□	1056.5	1096.5	706	770	10	3	600	180
11-LEJS63□□□-800□□-□□□□	1156.5	1196.5	806	870	12	4	800	80
11-LEJS63□□□-900□□-□□□□	1256.5	1296.5	906	970	12	4	800	180
11-LEJS63□□□-1000□□-□□□□	1356.5	1396.5	1006	1070	14	5	1000	80
11-LEJS63□□□-1200□□-□□□□	1556.5	1596.5	1206	1270	16	6	1200	80
11-LEJS63□□□-1500□□-□□□□	1856.5	1896.5	1506	1570	18	7	1400	180