

AC Servo Motor

Motorless Type

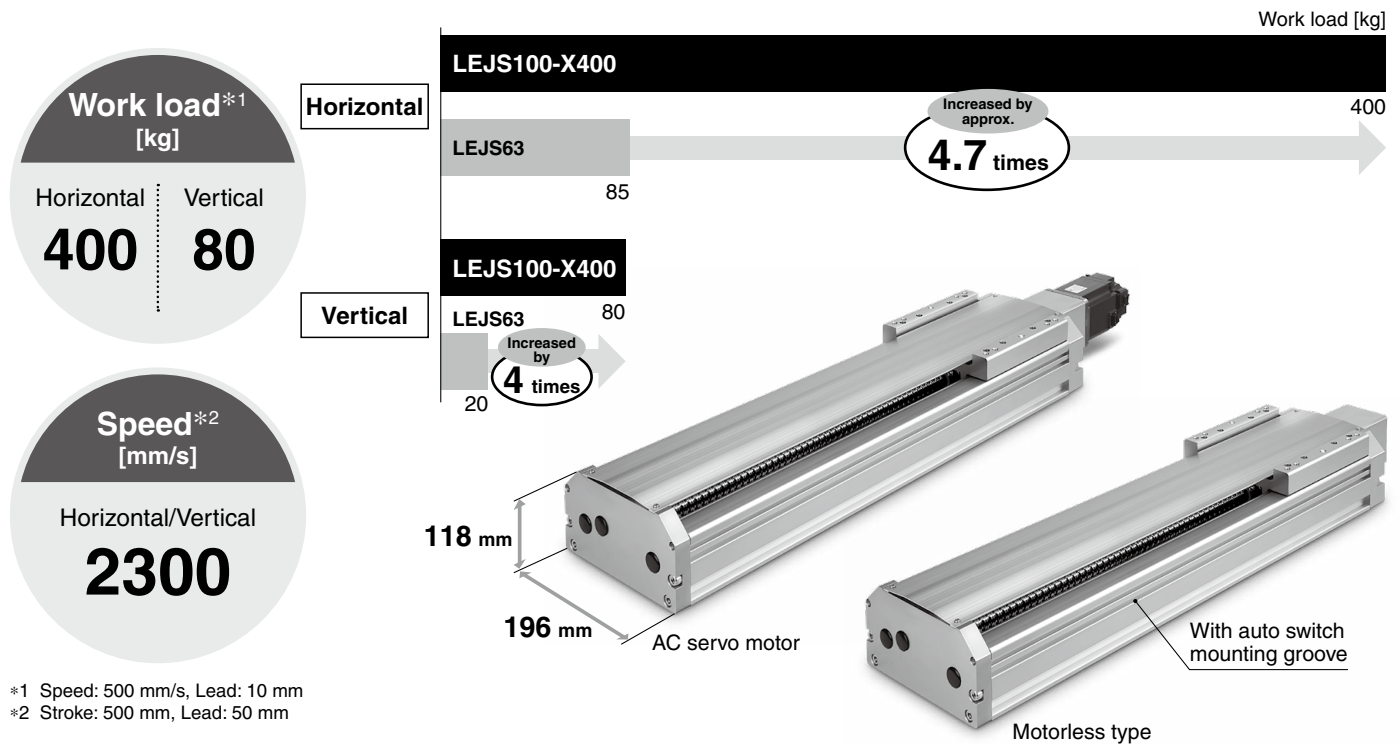
Electric Actuator/High Rigidity Slider Type Ball Screw Drive



RoHS

[Excludes the motorless type]

● Supports **750 w** (Motor output)



*1 Speed: 500 mm/s, Lead: 10 mm
*2 Stroke: 500 mm, Lead: 50 mm

● Max. acceleration/deceleration: **9800 mm/s²**

AC Servo Motor Absolute Type

Pulse input type/Positioning type LECSB-T Series

- Positioning by up to 255 point tables
- Input type: Pulse input (Sink (NPN) type interface/Source (PNP) type interface)
- Control encoder: Absolute 22-bit encoder (Resolution: 4194304 p/rev)
- STO (Safe Torque Off) safety function available
- Parallel input: 10 inputs
output: 6 outputs



Motorless Type Compatible Motors by Manufacturer

Manufacturer	Series	Type	Compatible interfaces						
			Pulse input	CC-Link	SSCNET III	SSCNET III/H	MECHATROLINK II	MECHATROLINK III	DeviceNet
Mitsubishi Electric Corporation	MELSERVO-J3	HF-KP73	●	●	●				
	MELSERVO-J4	HG-KR73	●			●			
YASKAWA Electric Corporation	Σ-V	SGMJV-08	●				●	●	●
	Σ-7	SGM7J-08	●				●	●	●

Trademark: DeviceNet™ is a trademark of ODVA.

LEJS100-X400



19-E743

LEJS100-X400

AC Servo Motor Motorless Type

System Construction

Absolute encoder compatible **LECSB-T Series** (Pulse input type/Positioning type)

Provided by the customer

Power supply

Single phase 200 to 240 VAC (50/60 Hz)
Three phase 200 to 240 VAC (50/60 Hz)

◎ Option

Regeneration option Web Catalog
Part no.: **LEC-MR-RB-□**

Motor cable Web Catalog

Standard cable	Robotic cable
LE-CSM-S□□	LE-CSM-R□□

Lock cable Web Catalog

Standard cable	Robotic cable
LE-CSB-S□□	LE-CSB-R□□

Provided by the customer

Power supply for lock
24 VDC



Electric actuator
High rigidity slider type
LEJ Series

Encoder cable Web Catalog

Standard cable	Robotic cable
LE-CSE-S□□	LE-CSE-R□□

* The LECSB2-T□ cannot be used with the LEC-MR-SETUP221□.

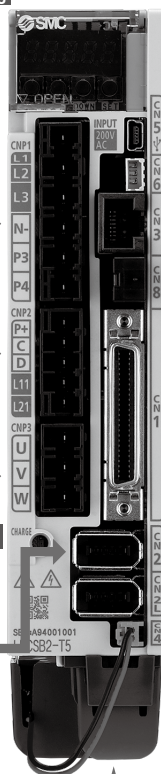
Main circuit power supply connector (Accessory) Web Catalog

Control circuit power supply connector (Accessory) Web Catalog

Motor connector (Accessory) Web Catalog

Battery (Accessory) Web Catalog
Part no.: **(LEC-MR-BAT6V1SET)**

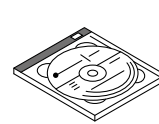
Driver



● **USB cable** Web Catalog ◎ Option
Part no.: **LEC-MR-J3USB**

Setup software Web Catalog

(MR Configurator2™)
Part no.: **LEC-MRC2□**

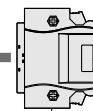


PC

● **Analog monitor output**
● **RS-422 communication**

◎ Option

● **STO cable (3 m)** Web Catalog
Part no.: **LEC-MR-D05UDL3M**



◎ Option
● **I/O connector** Web Catalog

Part no.: **LE-CSNB**

or

● **I/O cable** Web Catalog
Part no.: **LEC-CSNB-1**

Provided by the customer


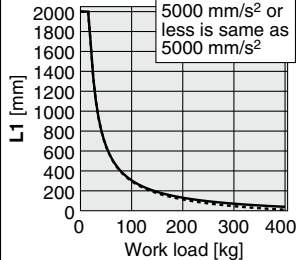
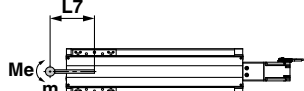
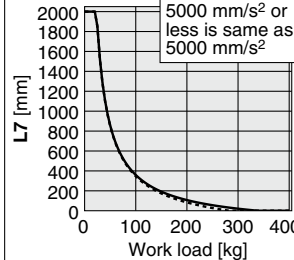
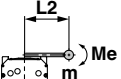
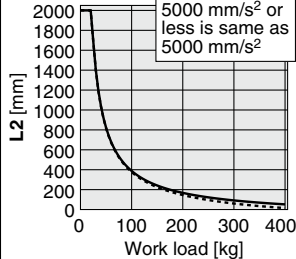
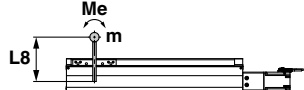
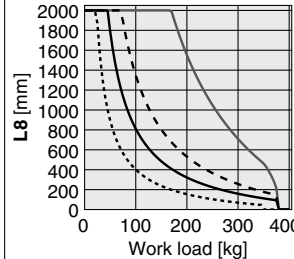

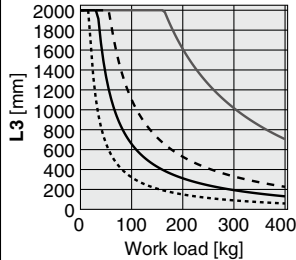
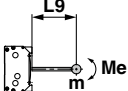
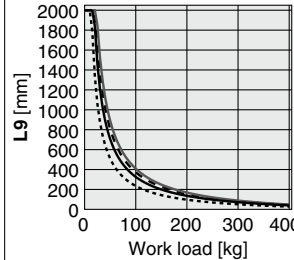

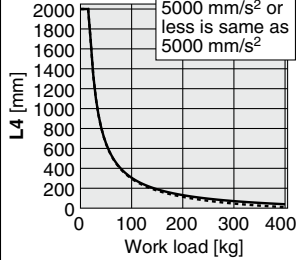
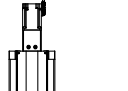
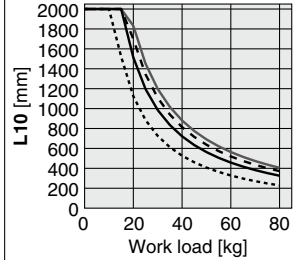
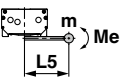
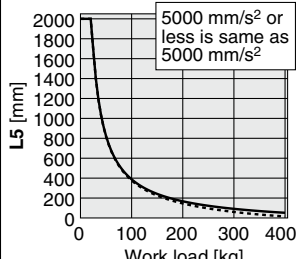

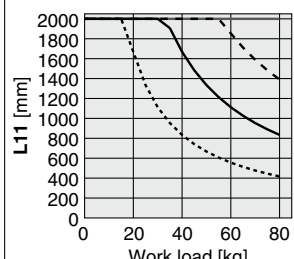

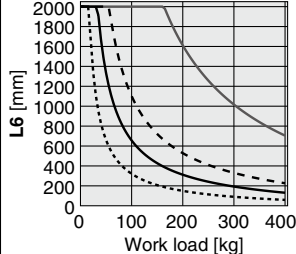
PLC (Positioning unit)

Power supply for I/O signal
24 VDC



Model Selection

Acceleration/Deceleration — 1000 mm/s² - - - 3000 mm/s² — 5000 mm/s² 10000 mm/s²

Orientation			Orientation		
Load overhanging direction			Load overhanging direction		
m: Work load [kg]			m: Work load [kg]		
Me: Dynamic allowable moment [N-m]			Me: Dynamic allowable moment [N-m]		
L: Overhang to the work load center of gravity [mm]			L: Overhang to the work load center of gravity [mm]		
Horizontal			Wall		
					
					
Bottom			Vertical		
					
					

Electric Actuator/High Rigidity Slider Type Ball Screw Drive **LEJS100-X400**



How to Order

LEJS100 T9 B - 500 T - - - - X400

Motor capacity: 750 W

With top cover type

1 Lead [mm]

H	50
A	25
B	10

2 Stroke [mm]

500	500
1000	1000
1500	1500

3 Motor option*1

Nil	Without option
B	With lock

4 Cable type*1

Nil	Without cable
S	Standard cable
R	Robotic cable

5 Cable length [m]*1

Nil	Without cable
2	2
5	5
A	10

6 Driver type*1

	Compatible driver Model	Power supply voltage [V]	Applicable network
Nil	Without driver	—	—
B2	LECSB2-T9	200 to 240	Pulse input/Point table

7 I/O cable length [m]*2

Nil	Without cable
H	Connector only
1	1.5

*1 When a driver type is selected, a cable is included.

Select the cable type and cable length.

Example)


S2B2: Standard cable (2 m) + Driver (LECSB2)

S2 : Standard cable (2 m)

Nil : Without cable and driver

*2 When "Without driver" is selected for driver type, only "Nil: Without cable" can be selected.

Compatible Driver

Driver type	Pulse input type
	
Series	LECSB-T
Number of point tables	Up to 255
Pulse input	○
Applicable network	—
Control encoder	Absolute 22-bit encoder
Communication function	USB communication, RS422 communication
Power supply voltage [V]	200 to 240 VAC (50/60 Hz)

Specifications

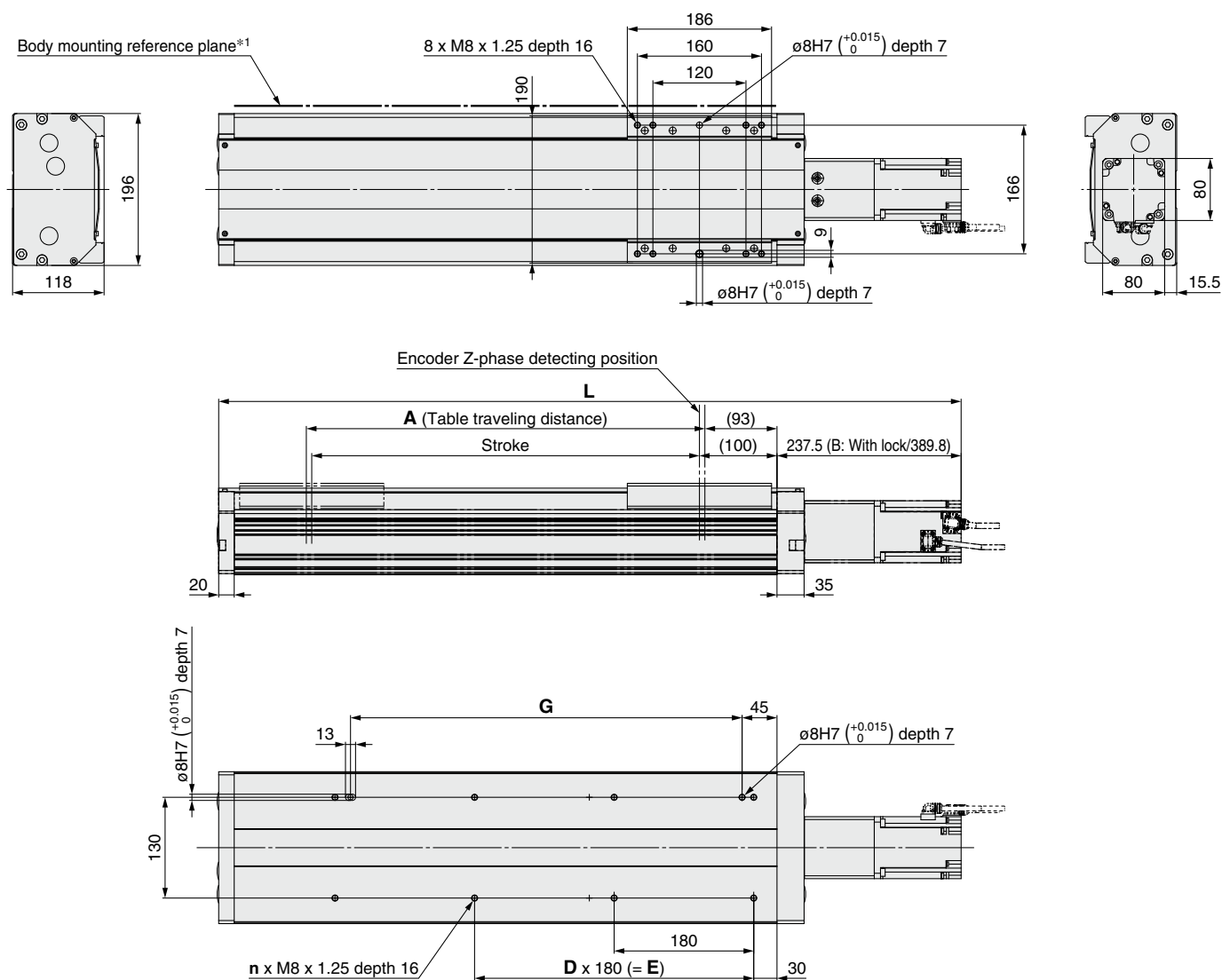
Stroke [mm]			500, 1000, 1500		
Lead [mm]			50	25	10
Horizontal work load [kg]	3000 [mm/s ²]		60	150	400
	5000 [mm/s ²]		43	93	150
	9800 [mm/s ²]		22	36	—
Vertical work load [kg]	3000 [mm/s ²]		14	29	80
	5000 [mm/s ²]		12	29	30
	9800 [mm/s ²]		8	9	—
Max. speed [mm/s]	Stroke range	500	2300	1250	500
		1000	1600	800	320
		1500	900	450	180
Max. acceleration/deceleration [mm/s ²]			9800		
Positioning repeatability [mm]			±0.01		
Lost motion [mm]			0.05 or less		
Impact/Vibration resistance [m/s ²]			50/20		
Motor capacity			750 W		
Actuation type			Ball screw		
Guide type			Linear guide (Double axis)		
Operating temperature range [°C]			5 to 40		
Operating humidity range [%RH]			90 or less (No condensation)		

* Do not allow collisions at either end of the table traveling distance. Additionally, when running the positioning operation, do not set within 7 mm of both ends.

LEJS100-X400

AC Servo Motor

Dimensions: Ball Screw Drive



*1 Use a pin when mounting the actuator using the body mounting reference plane. Set the height of the pin to be 5 mm or more because of round chamfering. (Recommended height 6 mm)

* Please consult with SMC for adjusting the Z-phase detecting position at the stroke end of the end side.

Dimensions and Weight

Stroke	L		A	n	D	E	G	Weight [kg]	
	Without lock	With lock						Without lock	With lock
500	957.5	997.8	514	8	3	540	505	26.7	27.7
1000	1457.5	1497.8	1014	14	6	1080	1045	37.1	38.1
1500	1957.5	1997.8	1514	20	9	1620	1585	47.6	48.6

AC Servo Motor Driver

Absolute Type

LECSB-T (Pulse input type/Positioning type)



How to Order



LECSB 2-T9

Driver type

B	Pulse input type/Positioning type (For absolute encoder)
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Power supply voltage

2	200 to 240 VAC 50/60 Hz
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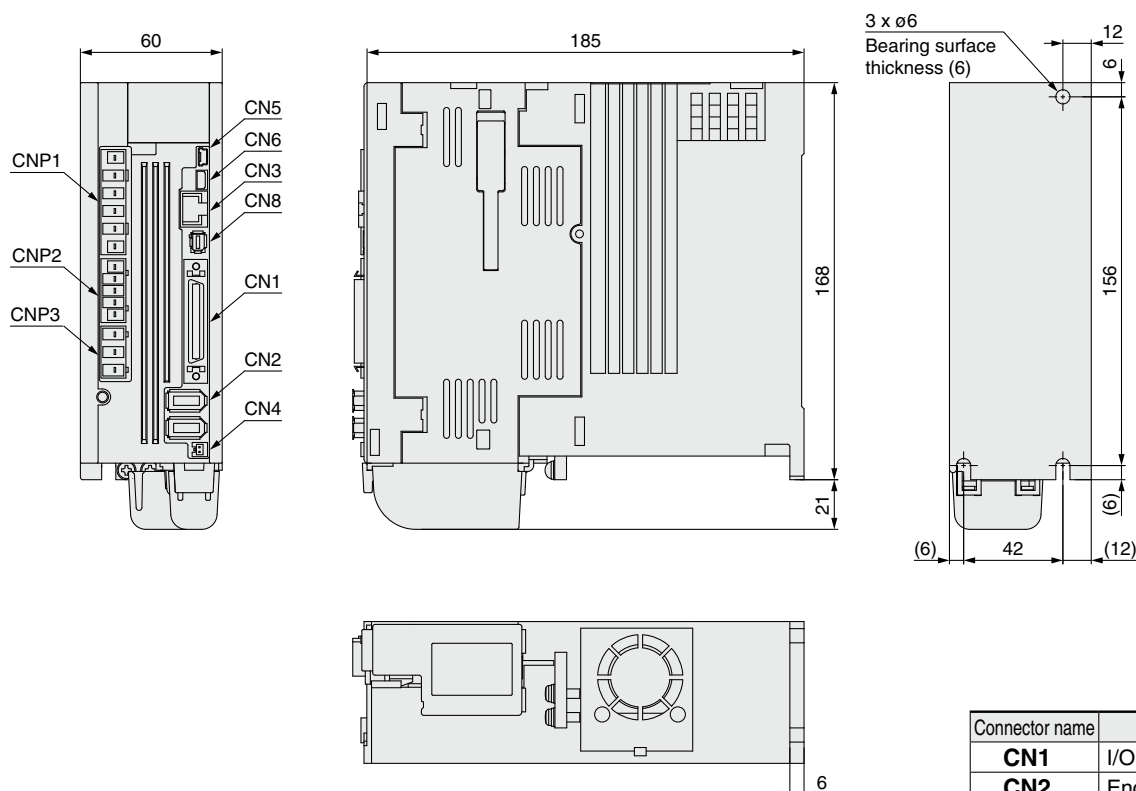
Compatible motor type

Symbol	Type	Capacity	Encoder
T9	AC servo motor (T9*1)	750 W	Absolute

*1 The symbol shows the motor type (actuator).

- * If an I/O connector is required, order the part number "LE-CSNB" separately.
 - * If an I/O cable is required, order the part number "LEC-CSNB-1" separately.
- (Since the electric actuator will not operate without forced stop (EM2) wiring when using the LECSB-T in any mode other than positioning mode, an I/O connector or an I/O cable is required.)

Dimensions



Connector name	Description
CN1	I/O signal connector
CN2	Encoder connector
CN3	RS-422 communication connector
CN4	Battery connector
CN5	USB communication connector
CN6	Analog monitor connector
CN8	STO input signal connector
CNP1	Main circuit power supply connector
CNP2	Control circuit power supply connector
CNP3	Servo motor power connector

LECSB-T

Specifications

Model		LECSB2-T9
Compatible motor capacity [W]		750
Compatible encoder		Absolute 22-bit encoder (Resolution: 4194304 p/rev)
Main power supply	Power voltage [V]	Three phase 200 to 240 VAC (50/60 Hz), Single phase 200 to 240 VAC (50/60 Hz)
	Allowable voltage fluctuation [V]	Three phase 170 to 264 VAC (50/60 Hz), Single phase 170 to 264 VAC (50/60 Hz)
	Rated current [A]	3.8
Control power supply	Control power supply voltage [V]	Single phase 200 to 240 VAC (50/60 Hz)
	Allowable voltage fluctuation [V]	Single phase 170 to 264 VAC
	Rated current [A]	0.2
Parallel input		10 inputs
Parallel output		6 outputs
Max. input pulse frequency [pps]		4 M (for differential receiver), 200 k (for open collector)
Function	In-position range setting [pulse]	0 to ±65535 (Command pulse unit)
	Error excessive	±3 rotations
	Torque limit	Parameter setting or external analog input setting (0 to 10 VDC)
	Communication	USB communication, RS422 communication*1
	Point table	Up to 255 points
	Pushing operation	Point table no. input method, Up to 127 points
Operating temperature range [°C]		0 to 55 (No freezing)
Operating humidity range [%RH]		90 or less (No condensation)
Storage temperature range [°C]		−20 to 65 (No freezing)
Storage humidity range [%RH]		90 or less (No condensation)
Insulation resistance [MΩ]		Between the housing and SG: 10 (500 VDC)
Weight [g]		1400

*1 USB communication and RS422 communication cannot be performed at the same time.

Motorless Type

Electric Actuator/High Rigidity Slider Type Ball Screw Drive *LEJS100-X400*



RoHS

How to Order

LEJS100 N B - 500 T - X400

Motorless type • ① • ② • With top cover type

① Lead [mm]

H	50
A	25
B	10

② Stroke [mm]

500	500
1000	1000
1500	1500

Specifications

	Stroke [mm]		500, 1000, 1500		
	Lead [mm]		50	25	10
Actuator specifications	Horizontal work load [kg]	3000 [mm/s ²]	60	150	400
		5000 [mm/s ²]	43	93	150
		9800 [mm/s ²]	22	36	—
	Vertical work load [kg]	3000 [mm/s ²]	14	29	80
		5000 [mm/s ²]	12	29	30
		9800 [mm/s ²]	8	9	—
	Max. speed [mm/s]	500	2300	1250	500
		1000	1600	800	320
		1500	900	450	180
	Max. acceleration/deceleration [mm/s ²]		9800		
	Positioning repeatability [mm]		±0.01		
	Lost motion [mm]		0.05 or less		
	Ball screw specifications	Thread size [mm]	ø25		
		Shaft length [mm]	Stroke + 284.5		
Other specifications	Impact/Vibration resistance [m/s ²]		50/20		
	Motor capacity		750 W		
	Actuation type		Ball screw		
	Guide type		Linear guide (Double axis)		
	Operating temperature range [°C]		5 to 40		
	Operating humidity range [%RH]		90 or less (No condensation)		
	Actuation unit weight [kg]		4.58		
	Friction coefficient		0.05		
	Mechanical efficiency		0.8		
	Motor shape		□80		
Reference motor specifications	Motor type		AC servo motor (200 V)		
	Rated output capacity [W]		750		
	Rated torque [N·m]		2.4		
	Rated rotation [rpm]		3000		

* Values in this specifications table are the allowable values of the actuator body with the standard motor mounted. Do not use the actuator so that it exceeds these values.

* Before mounting the coupling, remove any dust, oil, etc., adhered to the shaft and the inner surface of the coupling.

* This product does not come with a motor, motor mounting screw, or couplings. They should be prepared separately by the customer.

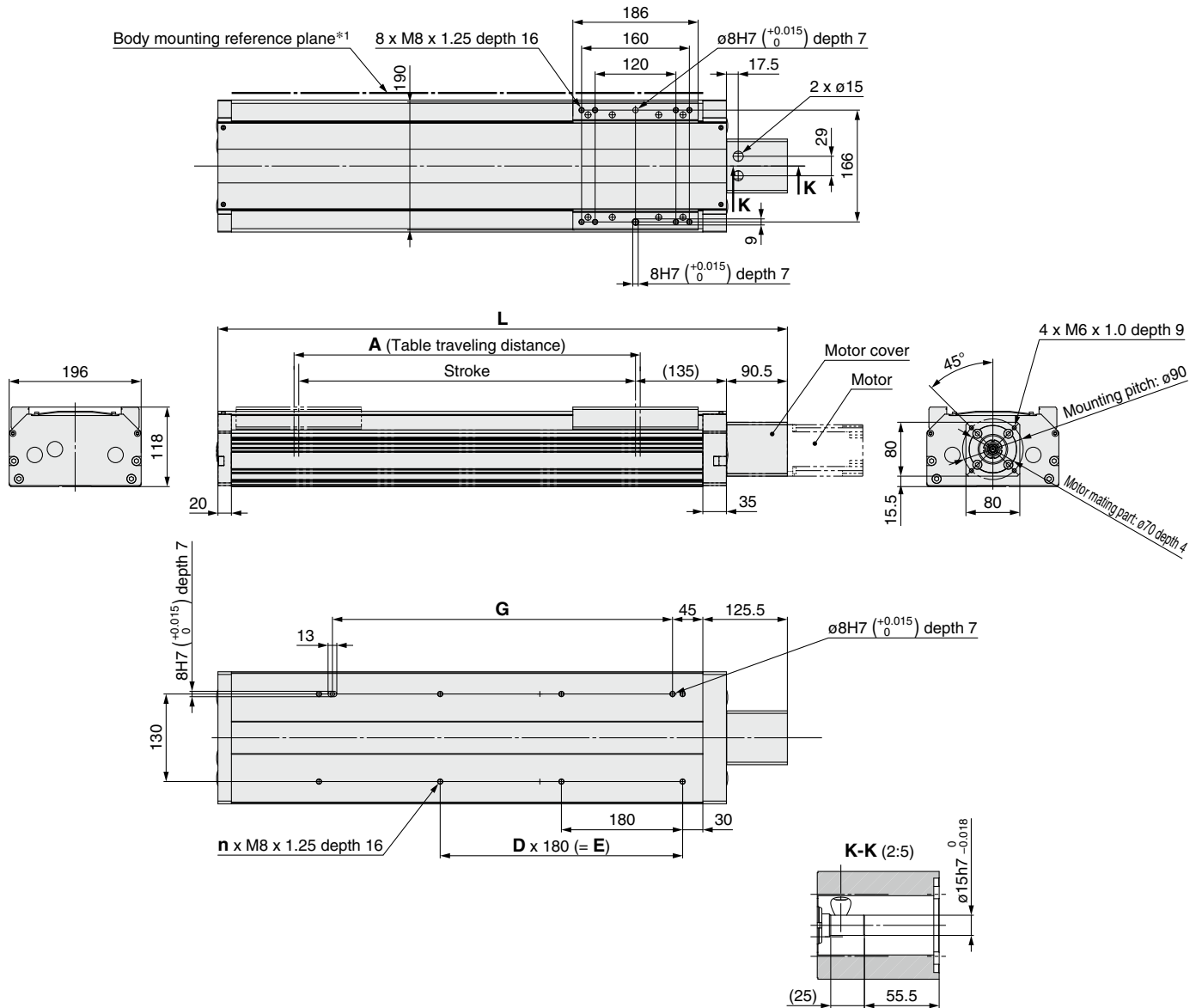
* Take measures to prevent the loosening of the motor mounting screws.

* Do not allow collisions at either end of the table traveling distance. Additionally, when running the positioning operation, do not set within 7 mm of both ends.

LEJS100-X400

Motorless Type

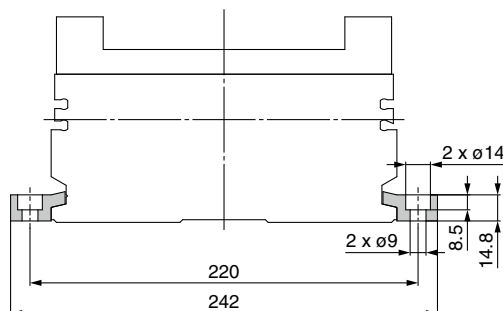
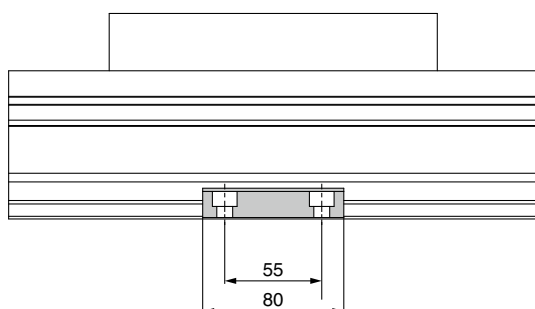
Dimensions



*1 Use a pin when mounting the actuator using the body mounting reference plane or the side supports. Set the height of the pin to be 5 mm or more because of round chamfering. (Recommended height 6 mm)

Side Supports

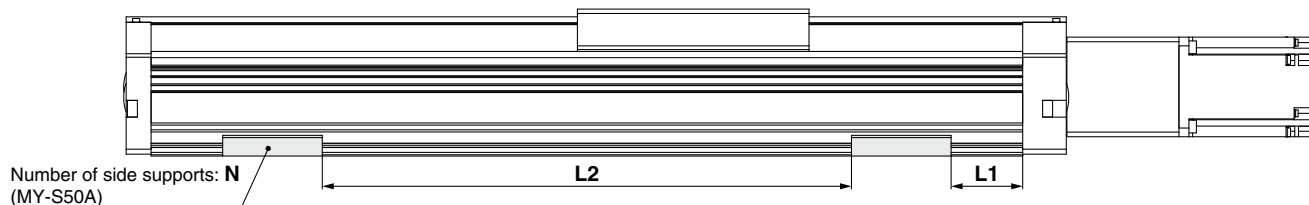
Side supports: MY-S50A



* The side supports consist of a set of right and left brackets.

Usage Guide for Side Supports

When mounting with the side supports, be sure to use the number of side supports (N) and the support spacing (L1 and L2) shown in the figure and table below as a guide.

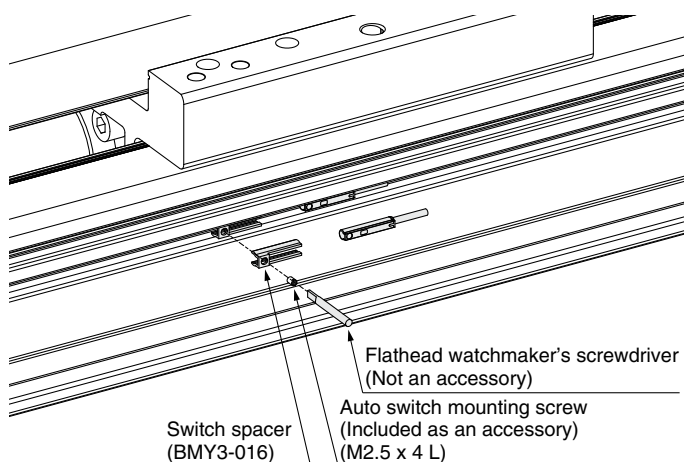


Stroke	N (Qty.)	L1 [mm]	L2 [mm]	Screw size	Max. tightening torque [N·m]
500 st	6	15	165	M8 x 1.25	12.5
1000 st	10		175		
1500 st	14		180		

- When mounting with the side supports, use in combination with the pin on the bottom of the body.
- For vertical or bottom mounting, please refrain from using only the side supports.

Auto Switch Mounting

When mounting an auto switch, first, hold a switch spacer between your fingers and press it into the auto switch mounting groove. When doing this, confirm that it is set in the correct mounting orientation, or reattach it if necessary. Next, insert an auto switch into the auto switch mounting groove and slide it until it is positioned under the switch spacer. After establishing the mounting position, use a flathead watchmaker's screwdriver to tighten the included auto switch mounting screw.



Auto Switch Mounting Screw Tightening Torque

Auto switch model	Tightening torque
D-M9□(V)	0.10 to 0.15
D-M9□W(V)	

