With Input Signals to Perform Jog Operations

Step Motor Controller

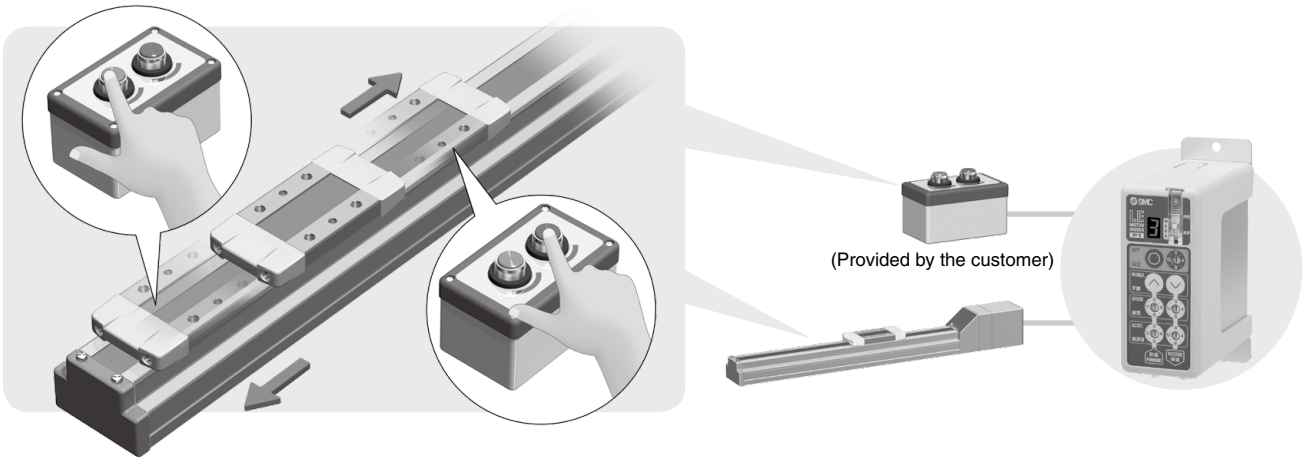
Jog operation can be performed using parallel input signals.

Jog operations that could previously only be performed using the button on the front face can now be performed using the ON/OFF status of the input signal.

∗ Input signals “JOG+” and “JOG–” are used as motion instructions.

Application Examples

Optimal for adjusting the feed value using a button operation while checking the motion of the actuator



Specifications

Specifications not listed are the same as those of the standard product. For details, refer to the **Web Catalog**.

Model		LECP1□-□-XB182
Compatible motor		Step motor (Servo/24 VDC)
Power supply		Power voltage: 24 VDC ±10%∗1 [Including motor drive power, control power, stop, lock release]
Parallel input		6 inputs (Photo-coupler isolation)
Parallel output		6 outputs (Photo-coupler isolation)
Function	**Number of positioning points**	2 points
	Jog input	Yes
Operating temperature range [°C]		0 to 40 (No freezing)
Operating humidity range [%RH]		90 or less (No condensation)
Storage temperature range [°C]		−10 to 60 (No freezing)
Storage humidity range [%RH]		90 or less (No condensation)
Weight [g]		130 (Screw mounting), 150 (DIN rail mounting)

∗1 The power consumption changes depending on the actuator model. Refer to the actuator specifications for more details.

Control Timing Chart

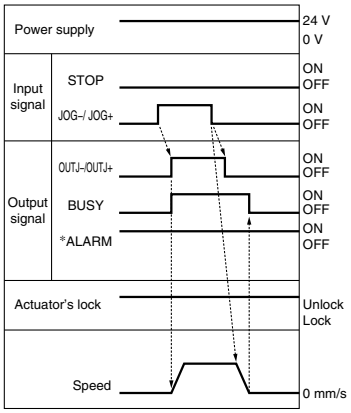
Jog

– Procedure –

① When an alarm is not being generated (ALARM output ON), and the STOP input is OFF, set the JOG– input or the JOG+ input to ON.
↓
② The OUTJ– output or the OUTJ+ output goes ON, and motion starts. The BUSY output goes ON.
↓
③ Set the JOG– input or the JOG+ input to OFF.
↓
④ The OUTJ– output or the OUTJ+ output goes OFF, and speed reduction starts.
↓
⑤ Motion stops, and the BUSY output goes OFF.

∗ **A JOG– input and a JOG+ input cannot be turned ON simultaneously.**

– Timing Chart –



∗ “*ALARM” is expressed as a negative-logic circuit.

LECP1-XB182

LECP1-XB182

How to Order

LE C P 1 N □ □ – □ – XB182

- **Electric actuator**
- **Controller**
- **Compatible motor**

P	Step motor (Servo/24 VDC)

- **Parallel input/output type**

N	NPN
P	PNP

- **I/O cable length**

Nil	Without cable
1	1.5 m
3	3 m
5	5 m

- **DIN rail**

Nil	Not mountable
D	Mountable

∗ The DIN rail is not included. It must be ordered separately.

- **Actuator part number**

(Enter the portion from the actuator model "LE" to the "stroke".)
Example: Enter "LEHZ10LK2-4" for the LEHZ10LK2-4AF-R11N1D.

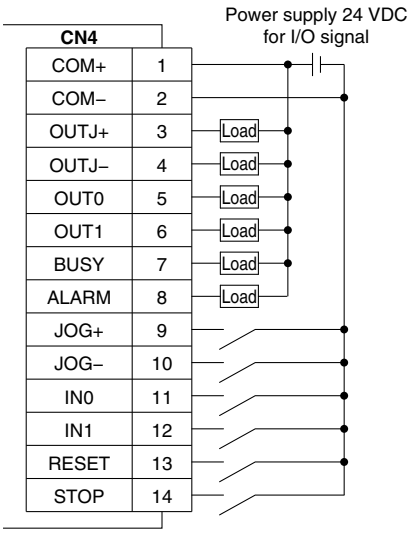
- **With input signals to perform jog operations (Stop points: 2 points)**

Wiring Diagram

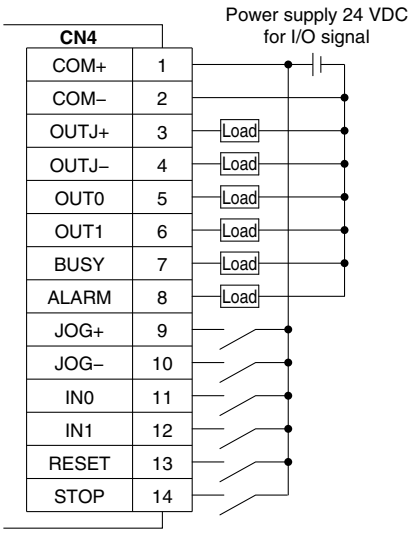
Parallel I/O connector: CN4

∗ When you connect a PLC to the CN4 parallel I/O connector, use the I/O cable (LEC-CK4-□).
∗ The wiring changes depending on the type of parallel I/O (NPN or PNP).

■NPN

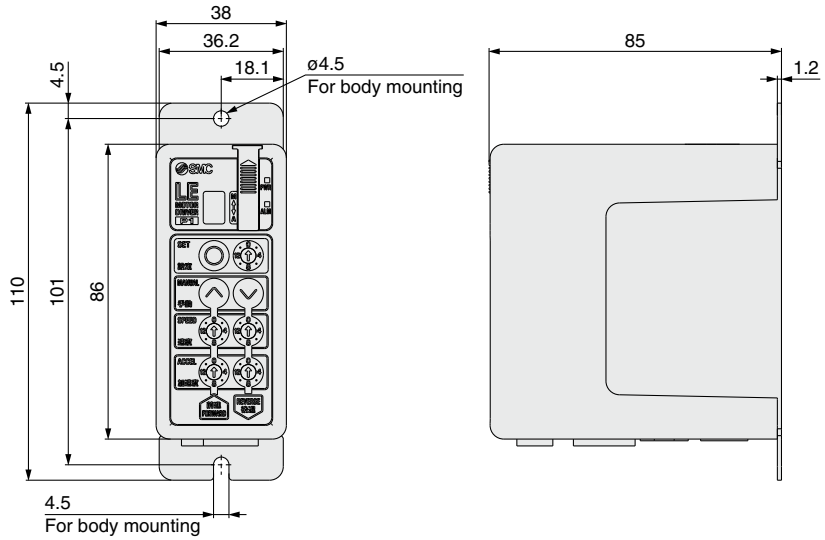


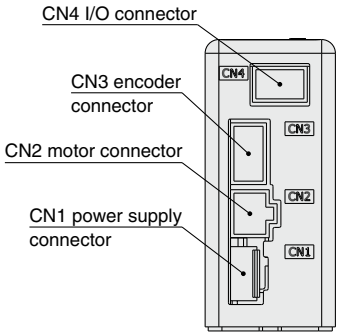
■PNP



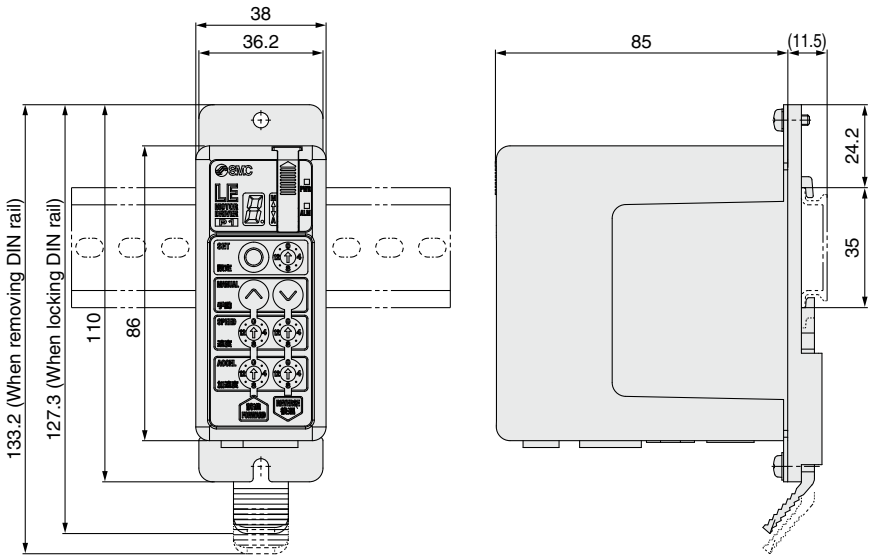
Dimensions

Screw mounting (LEC□1□□-□□-XB182)





DIN rail mounting (LEC□1□□D-□□-XB182)



⚠ Caution

① **Jog operation is a function that is provided mainly for checking the operation of the machine when adjusting, inspecting, or performing maintenance on it.**
While a jog operation is taking place, the alarm related to operation will not be detected. For this reason, it is not recommended to use this function during automatic operation of the machine.

② **If the moving part of the electric actuator is caused to collide with an object during a jog operation, the electric actuator is likely to break down.**
Before using the actuator, carefully check that it will not collide with any objects.

⚠ **Safety Instructions**	Be sure to read the “Handling Precautions for SMC Products” (M-E03-3) and “Operation Manual” before use.