

## Controllers/Drivers

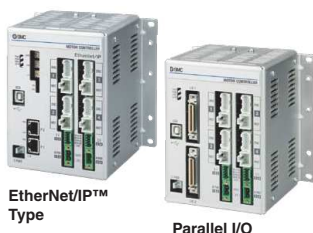
### Controller/Step Data Input Type **LECP6/LECA6**



- The controller is already set with the data of the actuator. (The actuator and controller are provided as a set.)
- Easy operation and simple setting: Easy mode, Detail setting: Normal mode
- Teaching box, controller setting software

| Type                 | Series | Compatible motor          | Power supply voltage | Parallel I/O                    |                                 | Number of step data |
|----------------------|--------|---------------------------|----------------------|---------------------------------|---------------------------------|---------------------|
|                      |        |                           |                      | Input                           | Output                          |                     |
| Step data input type | LECP6  | Step motor (Servo/24 VDC) | 24 VDC $\pm 10\%$    | 11<br>(Photo-coupler isolation) | 13<br>(Photo-coupler isolation) | 64 points           |
|                      | LECA6  | Servo motor (24 VDC)      | 24 VDC $\pm 10\%$    |                                 |                                 | 64 points           |

### 4 Axis Step Motor Controller/(Parallel I/O/EtherNet/IP™ Type) **JXC73/83/93**



- 4-axis synchronous control
- Linear/circular interpolation
- Positioning/pushing operation
- Absolute/relative position coordinate instructions
- Step data input (Max. 2048 points)
- Space saving, reduced wiring

| Type                 | Series | I/O type     | Compatible motor          | Power supply voltage | Number of axes |
|----------------------|--------|--------------|---------------------------|----------------------|----------------|
| Step data input type | JXC73  | NPN          | Step motor (Servo/24 VDC) | 24 VDC $\pm 10\%$    | Max. 4 axes    |
|                      | JXC83  | PNP          | Step motor (Servo/24 VDC) | 24 VDC $\pm 10\%$    | Max. 4 axes    |
|                      | JXC93  | EtherNet/IP™ | Step motor (Servo/24 VDC) | 24 VDC $\pm 10\%$    | Max. 4 axes    |

### Programless Controller **LECP1**



- No programming required  
Capable of setting up an electric actuator operation without using a PC or teaching box
- Speed/acceleration 16-level adjustment
- Compatible with actuators with locks
- 3-level pushing force settings

| Type             | Series | Compatible motor          | Power supply voltage | Parallel I/O                   |                                | Number of step data |
|------------------|--------|---------------------------|----------------------|--------------------------------|--------------------------------|---------------------|
|                  |        |                           |                      | Input                          | Output                         |                     |
| Programless type | LECP1  | Step motor (Servo/24 VDC) | 24 VDC $\pm 10\%$    | 6<br>(Photo-coupler isolation) | 6<br>(Photo-coupler isolation) | 14 points           |

### Programless Controller (With Stroke Study) **LECP2**



- End to end operation similar to an air cylinder
- Positioning of 2 stroke end points + 12 intermediate points

| Type                                    | Series | Compatible motor          | Power supply voltage | Parallel I/O                   |                                | Number of step data                            |
|-----------------------------------------|--------|---------------------------|----------------------|--------------------------------|--------------------------------|------------------------------------------------|
|                                         |        |                           |                      | Input                          | Output                         |                                                |
| Programless type<br>(With stroke study) | LECP2  | Step motor (Servo/24 VDC) | 24 VDC $\pm 10\%$    | 6<br>(Photo-coupler isolation) | 6<br>(Photo-coupler isolation) | 2 stroke end points,<br>12 intermediate points |

## Controllers/Drivers

### Step Motor Driver (Pulse Input Type) **LECPA**



- A driver that uses pulse signals to allow positioning at any position  
The actuator can be controlled from the customers' positioning unit.
- Return-to-origin command signal
- With force limit function (Pushing force/Gripping force operations are available.)

| Type             | Series | Compatible motor          | Power supply voltage | Parallel I/O                |                             | Number of step data |
|------------------|--------|---------------------------|----------------------|-----------------------------|-----------------------------|---------------------|
|                  |        |                           |                      | Input                       | Output                      |                     |
| Pulse input type | LECPA  | Step motor (Servo/24 VDC) | 24 VDC ±10%          | 5 (Photo-coupler isolation) | 9 (Photo-coupler isolation) | —                   |

### Step Motor Controller/CC-Link Direct Input Type **LECPMJ**



- CC-Link Ver. 1.10 compatible
- External data import function
- Position and speed can be monitored by the PLC touch panel (display).
- Step data can be edited from the PLC touch panel (display).

| Type                      | Series | Compatible motor          | Power supply voltage | Fieldbus          |
|---------------------------|--------|---------------------------|----------------------|-------------------|
| CC-Link direct input type | LECPMJ | Step motor (Servo/24 VDC) | 24 VDC ±10%          | CC-Link Ver. 1.10 |

### Step Motor Controller/EtherNet/IP™ Direct Input Type **JXC91**



- EtherNet/IP™ compatible
- 10/100 Mbps high-speed communication
- Dual port connection  
Transition wiring of communication cable
- Recovery is possible during a disconnection of the device level ring (DLR)!

| Type                           | Series | Compatible motor          | Power supply voltage | Fieldbus     |
|--------------------------------|--------|---------------------------|----------------------|--------------|
| EtherNet/IP™ direct input type | JXC91  | Step motor (Servo/24 VDC) | 24 VDC ±10%          | EtherNet/IP™ |

### Fieldbus-compatible Gateway (GW) Unit **LEC-G**

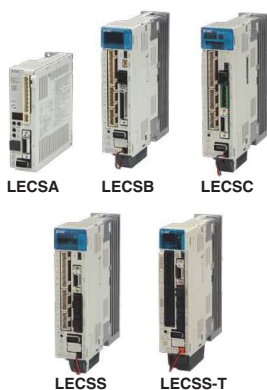


- The LE□ series electric actuators are applicable to Fieldbus protocols.
- Conversion unit for Fieldbus network and LEC serial communication
- 2 methods of operation:  
Step data input, numerical data input
- Position, speed, and other. values can be checked on the PLC.

| Series | Applicable fieldbus                                  | Power supply voltage | Applicable controllers       |
|--------|------------------------------------------------------|----------------------|------------------------------|
| LEC-G  | CC-Link<br>DeviceNet™<br>PROFIBUS DP<br>EtherNet/IP™ | 24 VDC ±10%          | LECP6 series<br>LECA6 series |

## Controllers/Drivers

### AC Servo Motor Controller (Pulse Input Type) **LECS**



- Pulse input type motor driver
- Compatible motor capacity: 100 W, 200 W, 400 W
- Compatible encoders:  
Incremental type  
Absolute type
- Servo adjustment using auto gain tuning
- With display setting function

| Type                                                   | Series  | Compatible motor                  | Power supply voltage                                         | Parallel I/O |        |
|--------------------------------------------------------|---------|-----------------------------------|--------------------------------------------------------------|--------------|--------|
|                                                        |         |                                   |                                                              | Input        | Output |
| Pulse input type<br>(For incremental encoder)          | LECSA   | AC servo motor<br>(100/200/400 W) | 100 to 120 VAC<br>(50/60 Hz)<br>200 to 230 VAC<br>(50/60 Hz) | 6            | 4      |
| Pulse input type<br>(For absolute encoder)             | LECSB   |                                   |                                                              | 10           | 6      |
| CC-Link<br>direct input type<br>(For absolute encoder) | LECS    |                                   |                                                              | —            | —      |
| SSCNET III type<br>(For absolute encoder)              | LECSS   |                                   |                                                              | —            | —      |
| SSCNET III/H type<br>(For absolute encoder)            | LECSS-T |                                   | 200 to 240 VAC<br>(50/60 Hz)                                 | —            | —      |

### AC Servo Motor Driver (MECHATROLINK Compatible) **LECYM/LECYU**



- Position control, speed control, and torque control can be used.
- Control encoder: Absolute 20-bit encoder  
(Resolution: 1048576 p/rev)
- Applicable Fieldbus protocol: MECHATROLINK- II , MECHATROLINK- III

| Type                                            | Series | Compatible motor                  | Power supply voltage         | Parallel I/O                          |                                                                             |
|-------------------------------------------------|--------|-----------------------------------|------------------------------|---------------------------------------|-----------------------------------------------------------------------------|
|                                                 |        |                                   |                              | Input                                 | Output                                                                      |
| MECHATROLINK-II type<br>(For absolute encoder)  | LECYM  | AC servo motor<br>(100/200/400 W) | 200 to 230 VAC<br>(50/60 Hz) | 7<br>(Number of optional allocations) | 1<br>(Number of fixed allocations)<br>3<br>(Number of optional allocations) |
| MECHATROLINK-III type<br>(For absolute encoder) | LECYU  | AC servo motor<br>(100/200/400 W) | 200 to 230 VAC<br>(50/60 Hz) | 7<br>(Number of optional allocations) | 1<br>(Number of fixed allocations)<br>3<br>(Number of optional allocations) |