

**Orientalmotor**

**RoHS** RoHS-Compliant  
Motorized Linear Slides

# EZ limo

**EZSII Series**



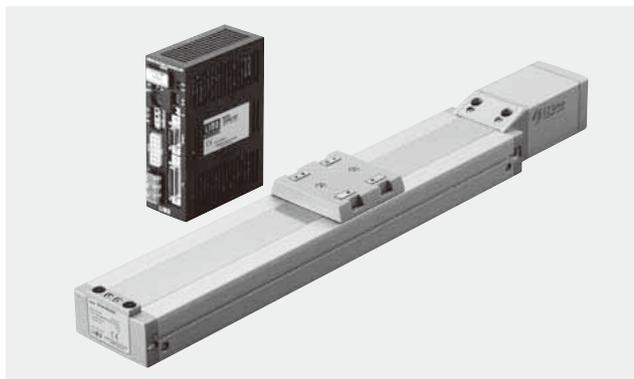
**RoHS** RoHS-Compliant

Motorized Linear Slides

# EZ limo EZS II Series

The high-precision, compact body was made possible by adopting a rolled ball screw and guide frame structure. The compact design facilitates installation and wiring to your system for added convenience.

CE



## Features

- Adopting a Closed-Loop  $\alpha$ STEP Stepping Motor, This Linear Slide Eliminates Misstep and Hunting, while Attaining High-Speed and High-Response Operation.

The linear slide has no hunting problem upon stopping. The vibration and noise levels have been lowered by employing advanced technology that produces smoothness comparable to a microstep driver.

- High-Speed Positioning Carrying a Heavy Load

**EZS6** (lead: 6 mm): Maximum transportable mass **60** kg

**EZS3, EZS4, EZS6** (lead: 12 mm): Maximum speed **800** mm/s  
(Single-phase 200-230 VAC Input)

- The Total Length of Linear Slide is Shorter for Every Stroke or Model.

**EZS3, EZS4**: Total length of linear slide = Stroke + 209.5 mm  
Since the space outside the linear slide's operating range is minimized, the overall system size can be reduced.

- Easy Wiring between the Linear Slide and Controller

The linear slide and controller are connected via a single cable, and the wiring distance can be extended to a maximum of 20 m\*.

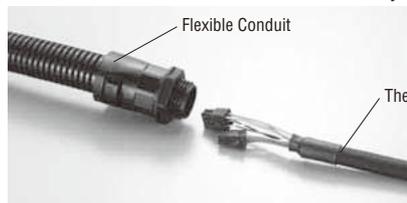
The cable is fitted with a connector for quick connection.

\*Maximum of 10 m for 24 VDC products.

The motor cable is sold separately.



The connector is attached at the end of the cable for easy connection.



The cable can be placed in a flexible conduit or cable gland with an inner diameter of  $\phi$ 16.5 mm.

## General Specifications of Motor

### General specifications of controller → Page 31

This is the value after rated operation under normal ambient temperature and humidity.

#### 24 VDC

Item	Specification
Insulation Resistance	100 MΩ or more when 500 VDC megger is applied between the following places: • Motor case–Motor/Sensor windings • Motor case–Windings of electromagnetic brake (Only for electromagnetic brake type)
Dielectric Strength	Sufficient to withstand the following for 1 minute: • Motor case–Motor/Sensor windings 0.5 kVAC 50 Hz • Motor case–Windings of electromagnetic brake (Only for electromagnetic brake type) 0.5 kVAC 50 Hz
Ambient Temperature	0~ +40°C (non-freezing)
Ambient Humidity	85% or less (non-condensing)

#### Single-Phase 200-230 VAC

Item	Specification
Insulation Resistance	100 MΩ or more when 500 VDC megger is applied between the following places: • Motor case–Motor/Sensor windings • Motor case–Windings of electromagnetic brake (Only for electromagnetic brake type)
Dielectric Strength	Sufficient to withstand the following for 1 minute: • Motor case–Motor/Sensor windings <b>EZS3, EZS4:</b> 1.0 kVAC 50 Hz <b>EZS6:</b> 1.5 kVAC 50 Hz • Motor case–Windings of electromagnetic brake (Only for electromagnetic brake type) 1.0 kVAC 50 Hz
Ambient Temperature	0~ +40°C (non-freezing)
Ambient Humidity	85% or less (non-condensing)

#### Note:

- Do not measure insulation resistance or perform the dielectric strength test while the linear slide and controller are connected.

## Safety Standards and CE Marking

Power Supply	Model	CE Marking
24 VDC	Linear slide	EMC Directives
	Controller	
Single-phase 200-230 VAC	Linear slide	Low Voltage Directive EMC Directives
	Controller	

- The EMC value changes according to the wiring and layout. Therefore, the final EMC level must be checked with the motor/driver incorporated in the user's equipment. If you require EMC data of linear slides or controllers, please contact your nearest Oriental Motor office.

### Machinery Directive (98/37/EC)

The linear slides, controllers and teaching pendants are designed and manufactured for use in general industrial equipment as an internal component, and therefore need not comply with the Machinery Directive. However, each product has been evaluated under the following standards to ensure proper operation: EN ISO 12100-1, EN ISO 12100-2, EN 1050, EN 60204-1

### Emergency Stop Function

The emergency stop circuits in the teaching pendant and controller are designed to the requirements under EN 954-1, Category 1.

See page 34 for a connection example that conforms to Stop Category 0 (non-controlled stop) under EN 60204-1.

### Emergency Stop Circuit

The customer must provide an appropriate emergency stop circuit by conducting risk assessment based on your system.



### Maintenance-Free for Long-Term Performance

The drive method uses a ball screw, while the guide mechanism adopts the LM Guide®. The ball screw employs the QZ™ lubrication system, while the LM Guide® uses the Ball Retainer® to retain the coupled rolling elements. These mechanisms give the system a considerable duration of maintenance-free performance.

- QZ™ lubrication system (THK): High-density fiber net supplies appropriate amounts of oil, thereby preventing oil wastage and reducing environmental burden.
- Ball Retainer®: Individual balls are retained in a manner allowing smooth rotation while preventing contact with adjacent balls. Use of the Ball Retainer® provides long-term, maintenance-free operating conditions and other benefits.
- Ball Retainer and LM Guide are registered trademarks of THK Co., Ltd.

### Order Your Linear Slide with the Necessary Stroke

Range of selectable strokes: **50 to 850** mm

**EZS3, EZS4:** 50 to 700 mm

**EZS6:** 50 to 850 mm

Each model is available with strokes in 50 mm increments.

### RoHS RoHS-Compliant

The **EZSII** Series conforms to the RoHS Directive that prohibits the used of six chemical substances including lead and cadmium.

**RoHS (Restriction of Hazardous Substances) Directive:** Directive on restriction of the use of certain hazardous substances in electrical and electronic equipment (2002/95/EC). The RoHS Directive prohibits the use of six chemical substances in electrical and electronic products sold in EU member states on or after July 1, 2006. The six controlled substances are: lead, hexavalent chromium, cadmium, mercury and two specific brominated flame-retardants (PBB and PBDE).

Combining all functions needed to operate a linear slide in positioning operations

**Features**

**Positioning Data of up to 63 Points Can be Set with Ease**

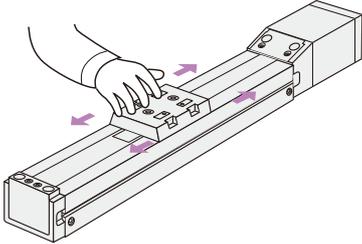
Position data can be set in one of three methods, as specified below (when the controller is used in the controller mode).

① Enter the desired travel (mm) directly.



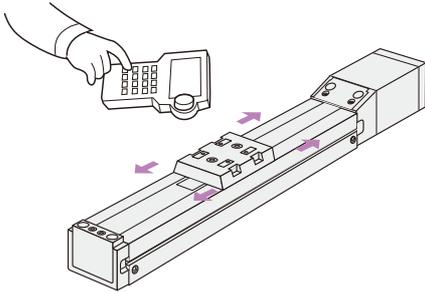
② Direct teaching

Move the table to the target position by manual, and store the achieved position as positioning data.



③ Remote teaching

Move the table to the target position using a teaching pendant or data editing software, and store the achieved position as positioning data.

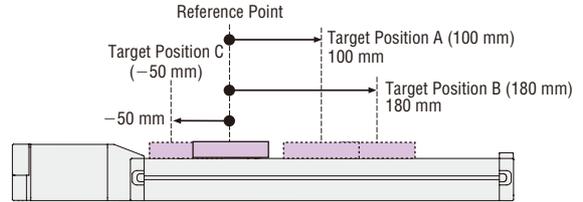


**Two Positioning Data Settings**

You can set positioning data in the absolute mode or incremental mode, depending on your preferred movement of the equipment.

◇ Absolute Mode:

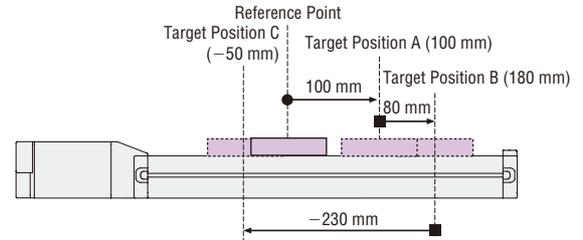
Each position is set as the absolute position with respect to the reference point. This is suitable when you want to move the work directly from an arbitrary position to the specified position.



◇ Incremental Mode:

Each position is relative, being set as an amount of travel from the current position or another target position for the work.

This is done in a regular feed or other operation where the same pattern is used repeatedly.



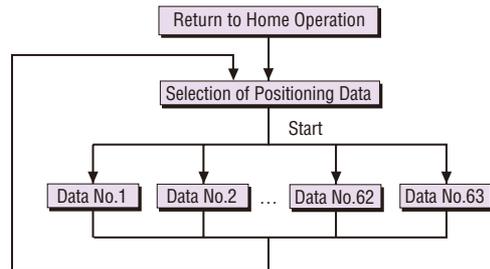
● Travel Amount Setting (Example)

Target Position	Travel Amount Setting	
	Absolute Mode	Incremental Mode
A	100	100
B	180	80
C	-50	-230

**Two Data Execution Modes: Selective Positioning and Sequential Positioning**

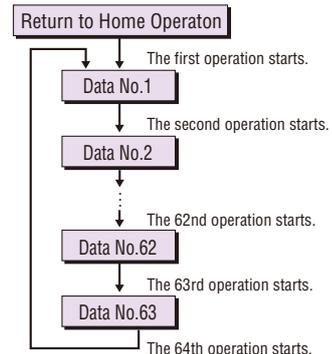
◇ Selective Positioning Mode:

The set data can be selected at random.



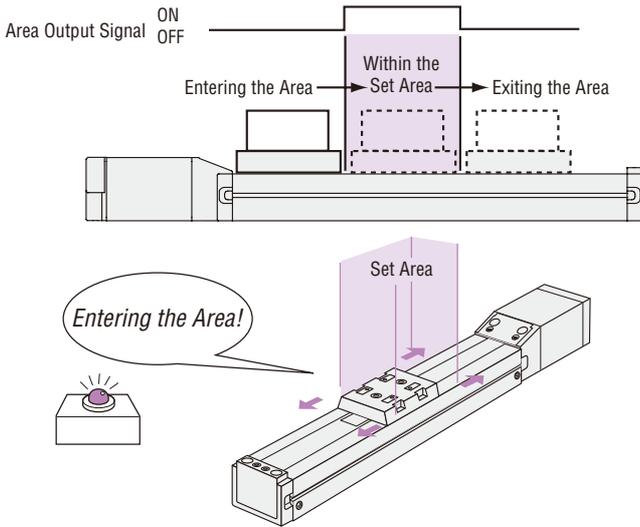
◇ Sequential Positioning Mode:

Positioning operation is performed sequentially from the desired data.



### ● Area Output Function

A signal is output when the linear slide table enters a set area arbitrarily set along the stroke. One set area can be set.



### ● Linked Operation

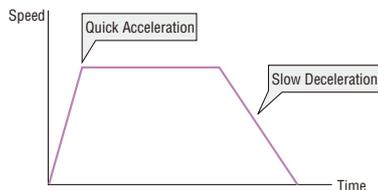
Up to four operation data can be linked, thereby allowing the linear slide to change speeds without stopping.

- Data with the same operation direction can be linked.



### ● Separate Acceleration and Deceleration Settings

Acceleration and deceleration can be set separately.



### ● Choice of Two Return to Home Methods

#### ◇ Sensorless Return to Home

Return to home is performed without the use of external sensors. The home position can be adjusted, and the direction of return to home can also be changed.

#### ◇ Return to Home Using Sensors

Return to home is performed using home sensors. The sensors are available as accessories (sold separately).

- Sensor set → Page 37

### ● Operation Using External Pulse Input

The **EZ limo** can be combined with your existing controller to serve as a driver controlling the linear slide by pulse input.

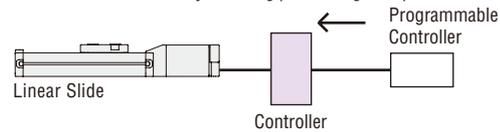
	Controller Mode	Driver Mode
Teaching Function	●	×
Monitoring Function	●	×
Pause Function	●	×
Area Output Function	●	×
Absolute Type	●	●
Sensorless Return to Home	●	●
Return to Home Using Sensor	●	●

\* Data must be set from the teaching pendant or data setting software.

### ● Normal System Configuration

#### Controller Mode

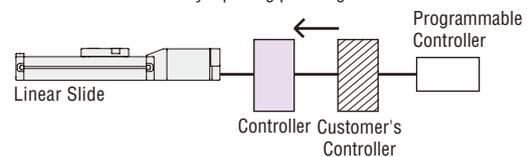
The linear slide is controlled by selecting positioning data preset in the controller.



### ● When Combined with the Customer's Controller

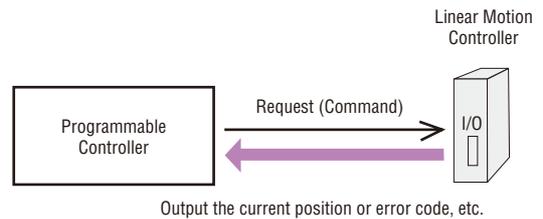
#### Driver Mode

The linear slide is controlled by inputting pulse signals.



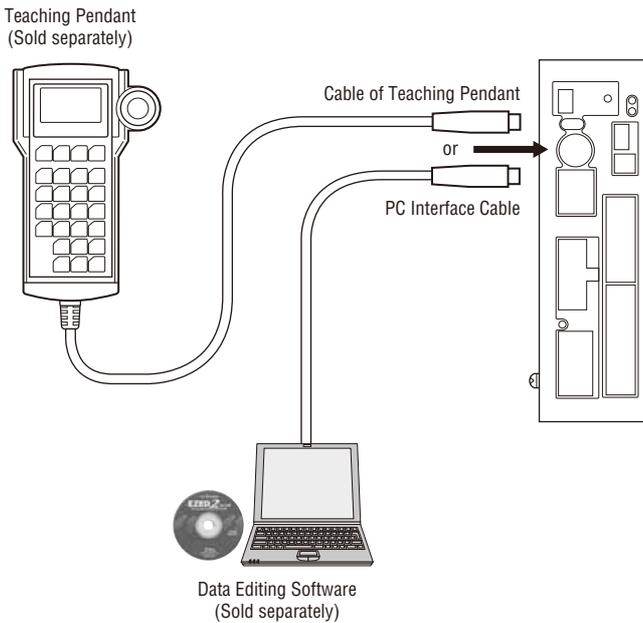
### ● Output of Current Position and Error Code

The current position, error code and certain other data can be output to an external device.



## Functions of Teaching Pendant (EZT1) and Data Editing Software (EZED2)

The teaching pendant and data editing software are available.  
Choose an appropriate accessory based on the required functions.



### Teaching Pendant (Sold separately) Model: EZT1



- All functions required for operation and adjustment, including setting of positioning data, test operation, and I/O monitoring, are provided.
- The dialogue-type user interface ensures easy operation. All you need is to enter values in the necessary fields.
- No dedicated power supply is necessary. Simply connect the cable to the controller.

```
FRG-Ins #01
Data insert
OK?:No    ENT:Set
Mode --- Yes No
```

### Teaching Pendant (EZT1)/Data Editing Software (EZED2) Function Comparison Table

Function	Item	
	Teaching Pendant (Model: EZT1)	Data Editing Software (Model: EZED2)
Cable Length	5 m	5 m <sup>*1</sup>
Display	LCD 17 characters × 4 lines	PC screen
Emergency Stop Switch	○	×
Operation Data Setting	○	○
Parameter Setting	○	○
Teaching Function (Direct/Remote)	○	○
Operation Data Monitoring	○	○
I/O & Alarm History Monitoring	○	○
Waveform Monitoring	×	○
Test Operation	○	○
Data Copy	×	○
Printing Function	×	○ <sup>*2</sup>

\*1 PC interface cable (included) is used.

\*2 The printing function is not available on computers running Windows®98, Me.

### Data Editing Software (Sold separately) Model: EZED2



- All functions required for operation and adjustment, including setting of positioning data, test operation, and I/O monitoring, are provided.
- Running on any Windows computer, the software is a graphic navigation tool that guides you through various operations in easy steps. This user-friendly feature makes this ideal accessory for editing large volumes of data.
- You can also access waveform monitoring, data copy and other features not available on the teaching pendant.

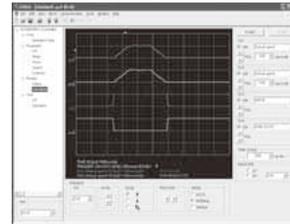
Data Editing



Test Operation



Waveform Monitoring



Status Monitoring



# Selection of Motorized Linear Slides EZSII Series

Linear Slide Size		EZS3				EZS4				EZS6				
Linear Slide Width × Height		54 mm × 50 mm				74 mm × 50 mm				74 mm × 66.5 mm				
Power Supply Voltage		24 VDC		Single-Phase* 200-230 VAC		24 VDC		Single-Phase* 200-230 VAC		24 VDC		Single-Phase* 200-230 VAC		
Lead	[mm]	12	6	12	6	12	6	12	6	12	6	12	6	
Maximum Load Moment [N·m]	M <sub>P</sub>	4.2				8				45.7				
	M <sub>Y</sub>	4				8				12.5				
	M <sub>R</sub>	10.5				27.8				55.6				
Maximum Transportable Mass in Horizontal Direction [kg]	60													
	10	7.5	15	7.5	15	15	30	15	30	30	30	60	30	60
Maximum Transportable Mass in Vertical Direction [kg]	30													
	5	3.5	7	3.5	7	7	14	7	14	15	15	30	15	30
Maximum Speed [mm/s]	800													
	100	600	300	800	400	600	300	800	400	600	300	800	400	400
Repetitive Positioning Accuracy [mm]		±0.02												
Stroke [mm]	800													
	50	50 ~ 700	50 ~ 700	50 ~ 700	50 ~ 700	50 ~ 700	50 ~ 700	50 ~ 700	50 ~ 700	50 ~ 700	50 ~ 850	50 ~ 850	50 ~ 850	50 ~ 850
Electromagnetic Brake		With electromagnetic brake or without electromagnetic brake are available												

\*For the single-phase 100-115 VAC models, please contact the nearest Oriental Motor sales office.

# Selection Calculations

After you have determined which series to use, select an appropriate model. Select a linear slide of the size that satisfies your desired condition.

Select an appropriate model by following the steps below.

## (1) Select a Linear Slide Satisfying the Transportable Mass

By referring to "■ specifications of linear slide," select a linear slide satisfying the transportable mass.

**Condition: Drive a work of 15 kg over a horizontal distance of 400 mm within 1.5 seconds.**

**EZS4:** Specifications of Width 74 mm × Height 50 mm, 24 VDC Linear Slide

■ Specifications of Linear Slide																		
Drive Method	Rolled Ball Screw		Repetitive Positioning Accuracy [mm]		±0.02		Resolution [mm]	0.01		Traveling Parallelism [mm]	0.03		Maximum Load Moment [N·m]			Mp: 8	Mv: 8	Mn: 27.8
Model	Lead [mm]	Transportable Mass [kg]		Maximum Speed (Stroke) [mm/s]				Thrust [N]	Electromagnetic Brake Holding Force [N]									
		Horizontal	Vertical	50~550mm	600mm	650mm	700mm											
<b>EZS4D</b> □-K	12	~15	—	600	550	460	400	~70	—									
<b>EZS4D</b> □M-K			~7						70									
<b>EZS4E</b> □-K	6	~30	—	300	270	220	200	~140	—									
<b>EZS4E</b> □M-K			~14						140									

● Enter the stroke in the box (□) within the model name.

Based on the "condition" and "specifications of linear slide," select **EZS4D040-K**.

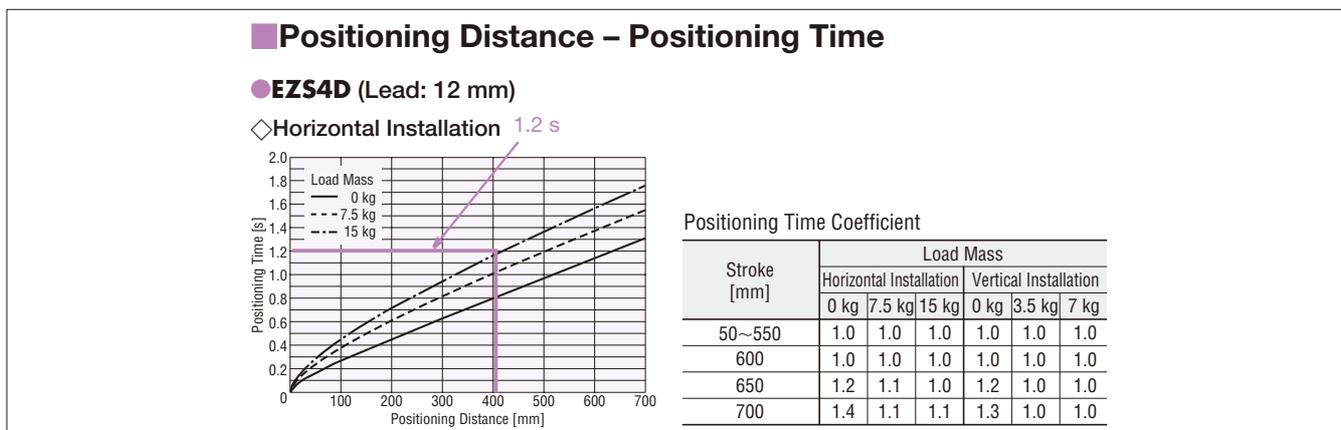
## (2) Check the Positioning Time

From the graph "■ positioning distance – positioning time" below, check if the selected linear slide satisfies the desired positioning time. As a rough guideline, the positioning time required by the selected linear slide corresponds to the positioning time identified from the graph, multiplied by the "positioning time coefficient" applicable to the linear slide.

From the graph, find the "positioning time of 1.2 s" for the "positioning distance of 400 mm." You obtain the "positioning time of 1.2 s." Since the stroke is below 550 mm, multiply "positioning time of 1.2 s" by the "positioning time coefficient of 1.0" to obtain an approximate positioning time.

### Notes:

- The calculated positioning time does not include the settling time.  
Use a settling time of 0.15 s as a reference.
- The running duty, which represents the relationship of running time and stopping time, should be kept to 50% or below (reference).  
Running duty [%] = running time [s] × 100 / (running time [s] + stopping time [s])



### (3) Check the Operating Speed and Acceleration of the Linear Slides

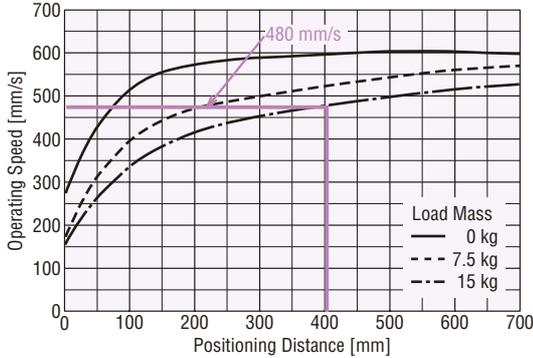
The time calculated from "■ positioning distance – positioning time" assumes the operating speed and acceleration that achieve the shortest positioning time. Check the specific operating speed and acceleration at which to drive the linear slides based on the time calculated in step (2).

#### ● Operating Speed and Acceleration of the Linear Slides

Check the operating speed and acceleration by referring to "■ positioning distance – operating speed" and "■ positioning distance – acceleration." If the identified speed exceeds the maximum speed specified in specifications of linear slide, use the maximum speed specified in specifications of linear slide as the operating speed of the linear slide.

Example) For a positioning distance of 400 mm on the graph, the operating speed is 480 mm/s, and the acceleration is 1.5 m/s<sup>2</sup>.

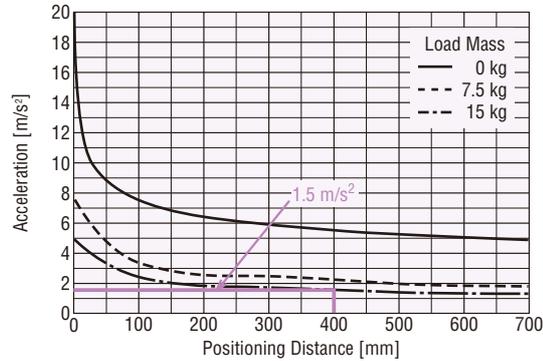
#### EZS4D040-K [■ Positioning Distance – Operating Speed]



#### Maximum Speed by Stroke

Stroke [mm]	Max. Speed [mm/s]
50~550	600
600	550
650	460
700	400

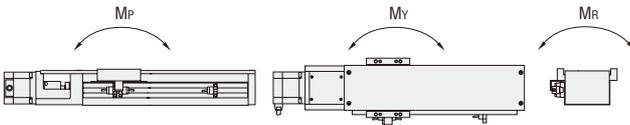
#### EZS4D040-K [■ Positioning Distance – Acceleration]



### (4) Check the Load Moment

Calculate the load that will generate under the applicable condition, and confirm that the calculated result is smaller than the "maximum load moment specified in specifications of linear slide." If the maximum load moment is exceeded, select another model.

The maximum load has been calculated by considering the estimated traveling life of each model. If a given model is operated at load exceeding the designed limit, the life of the linear slide will decrease. The life is also affected by the operating environment and conditions.

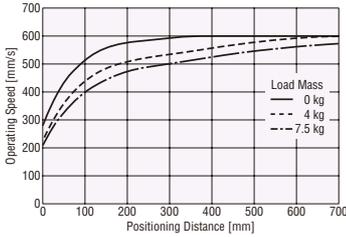


# Positioning Distance – Operating Speed, Positioning Distance – Acceleration

## ● EZS3D□-K (Lead 12 mm, 24 VDC)

### ◇ Horizontal Installation

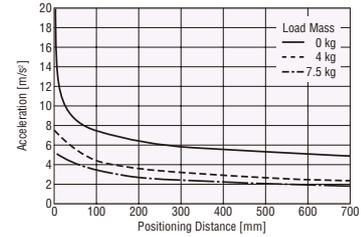
#### ● Positioning Distance – Operating Speed



#### Maximum Speed by Stroke

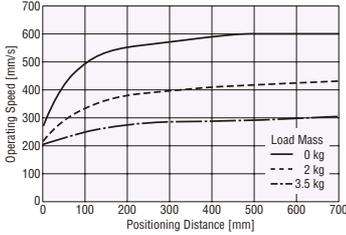
Stroke [mm]	Max. Speed [mm/s]
50~550	600
600	550
650	460
700	400

#### ● Positioning Distance – Acceleration



### ◇ Vertical Installation

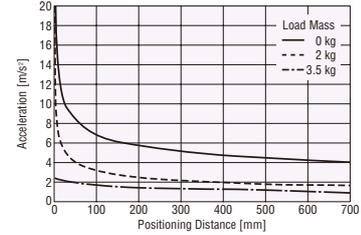
#### ● Positioning Distance – Operating Speed



#### Maximum Speed by Stroke

Stroke [mm]	Max. Speed [mm/s]
50~550	600
600	550
650	460
700	400

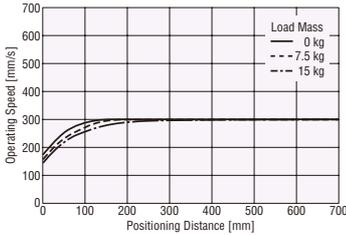
#### ● Positioning Distance – Acceleration



## ● EZS3E□-K (Lead 6 mm, 24 VDC)

### ◇ Horizontal Installation

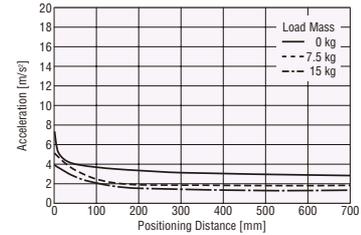
#### ● Positioning Distance – Operating Speed



#### Maximum Speed by Stroke

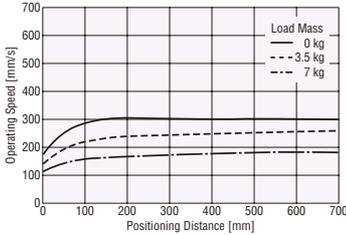
Stroke [mm]	Max. Speed [mm/s]
50~550	300
600	270
650	220
700	200

#### ● Positioning Distance – Acceleration



### ◇ Vertical Installation

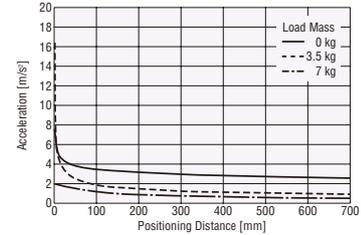
#### ● Positioning Distance – Operating Speed



#### Maximum Speed by Stroke

Stroke [mm]	Max. Speed [mm/s]
50~550	300
600	270
650	220
700	200

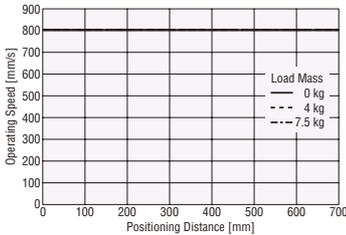
#### ● Positioning Distance – Acceleration



## ● EZS3D□-C (Lead 12 mm, Single-Phase 200-230 VAC)

### ◇ Horizontal Installation

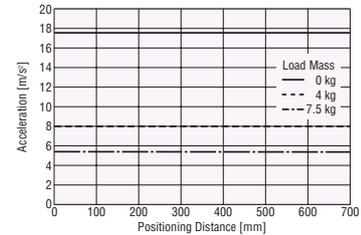
#### ● Positioning Distance – Operating Speed



#### Maximum Speed by Stroke

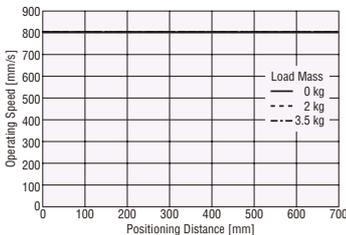
Stroke [mm]	Max. Speed [mm/s]
50~500	800
550	650
600	550
650	460
700	400

#### ● Positioning Distance – Acceleration



### ◇ Vertical Installation

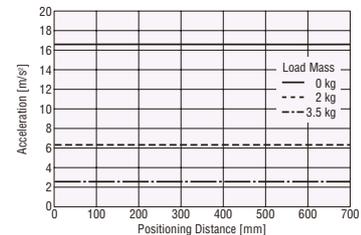
#### ● Positioning Distance – Operating Speed



#### Maximum Speed by Stroke

Stroke [mm]	Max. Speed [mm/s]
50~500	800
550	650
600	550
650	460
700	400

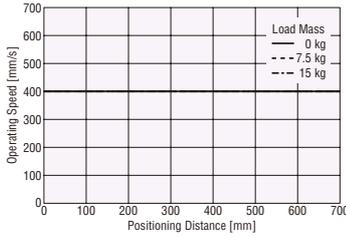
#### ● Positioning Distance – Acceleration



● **EZS3E□-C** (Lead 6 mm, Single-Phase 200-230 VAC)

◇ Horizontal Installation

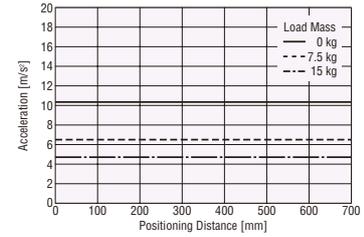
● Positioning Distance – Operating Speed



Maximum Speed by Stroke

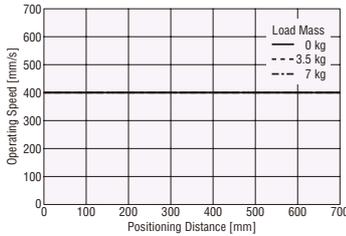
Stroke [mm]	Max. Speed [mm/s]
50~500	400
550	320
600	270
650	220
700	200

● Positioning Distance – Acceleration



◇ Vertical Installation

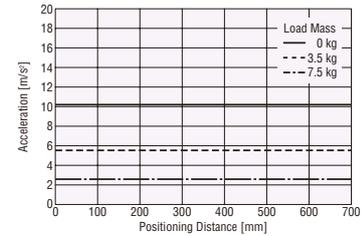
● Positioning Distance – Operating Speed



Maximum Speed by Stroke

Stroke [mm]	Max. Speed [mm/s]
50~500	400
550	320
600	270
650	220
700	200

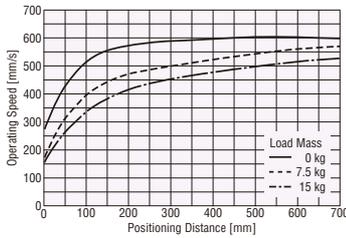
● Positioning Distance – Acceleration



● **EZS4D□-K** (Lead 12 mm, 24 VDC)

◇ Horizontal Installation

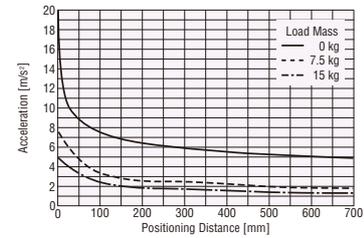
● Positioning Distance – Operating Speed



Maximum Speed by Stroke

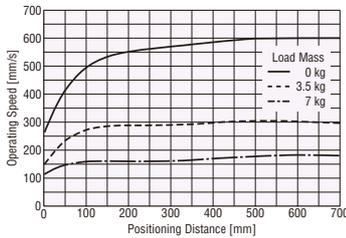
Stroke [mm]	Max. Speed [mm/s]
50~550	600
600	550
650	460
700	400

● Positioning Distance – Acceleration



◇ Vertical Installation

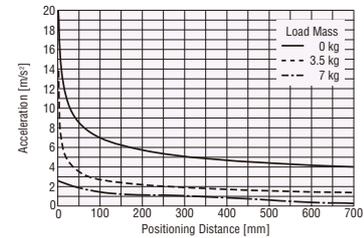
● Positioning Distance – Operating Speed



Maximum Speed by Stroke

Stroke [mm]	Max. Speed [mm/s]
50~550	600
600	550
650	460
700	400

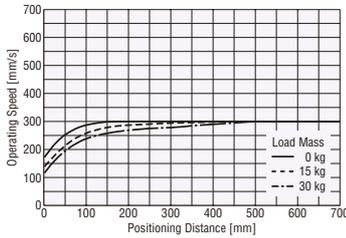
● Positioning Distance – Acceleration



● **EZS4E□-K** (Lead 6 mm, 24 VDC)

◇ Horizontal Installation

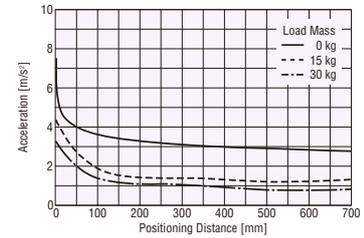
● Positioning Distance – Operating Speed



Maximum Speed by Stroke

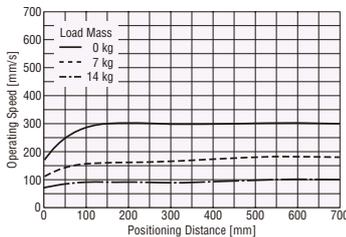
Stroke [mm]	Max. Speed [mm/s]
50~550	300
600	270
650	220
700	200

● Positioning Distance – Acceleration



◇ Vertical Installation

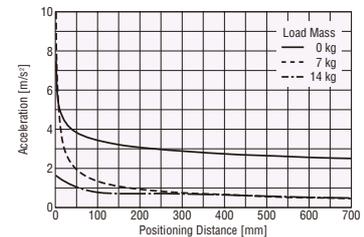
● Positioning Distance – Operating Speed



Maximum Speed by Stroke

Stroke [mm]	Max. Speed [mm/s]
50~550	300
600	270
650	220
700	200

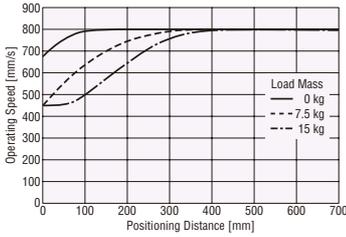
● Positioning Distance – Acceleration



● **EZS4D** □ -C (Lead 12 mm, Single-Phase 200-230 VAC)

◇ Horizontal Installation

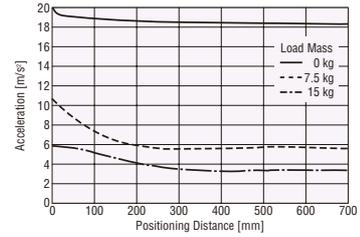
● Positioning Distance – Operating Speed



Maximum Speed by Stroke

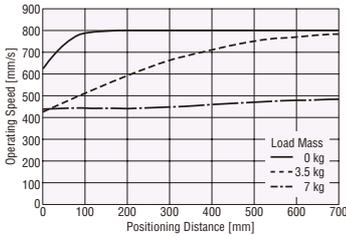
Stroke [mm]	Max. Speed [mm/s]
50~500	800
550	650
600	550
650	460
700	400

● Positioning Distance – Acceleration



◇ Vertical Installation

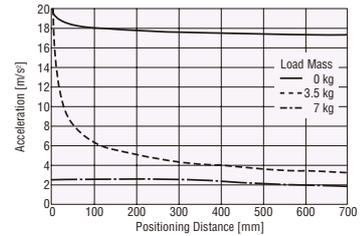
● Positioning Distance – Operating Speed



Maximum Speed by Stroke

Stroke [mm]	Max. Speed [mm/s]
50~500	800
550	650
600	550
650	460
700	400

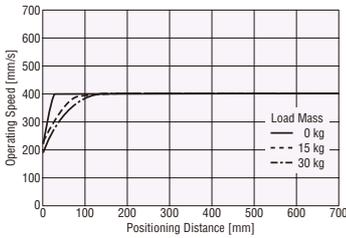
● Positioning Distance – Acceleration



● **EZS4E** □ -C (Lead 6 mm, Single-Phase 200-230 VAC)

◇ Horizontal Installation

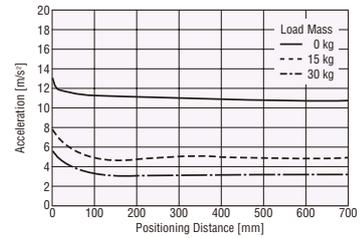
● Positioning Distance – Operating Speed



Maximum Speed by Stroke

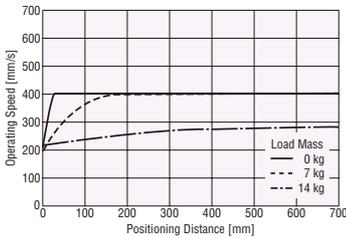
Stroke [mm]	Max. Speed [mm/s]
50~500	400
550	320
600	270
650	220
700	200

● Positioning Distance – Acceleration



◇ Vertical Installation

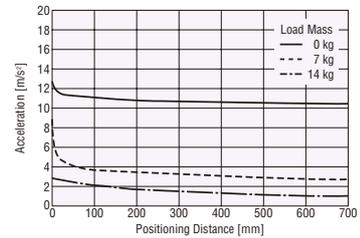
● Positioning Distance – Operating Speed



Maximum Speed by Stroke

Stroke [mm]	Max. Speed [mm/s]
50~500	400
550	320
600	270
650	220
700	200

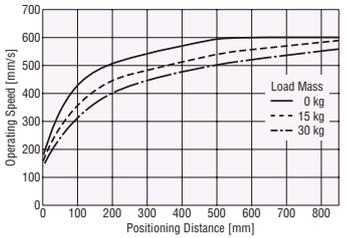
● Positioning Distance – Acceleration



● **EZS6D** □ -K (Lead 12 mm, 24 VDC)

◇ Horizontal Installation

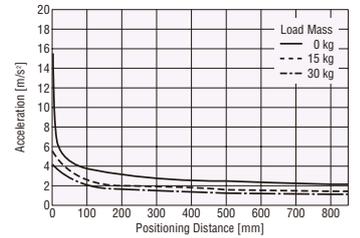
● Positioning Distance – Operating Speed



Maximum Speed by Stroke

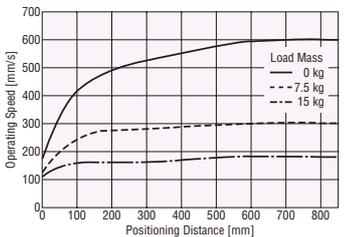
Stroke [mm]	Max. Speed [mm/s]
50~650	600
700	550
750	470
800	420
850	360

● Positioning Distance – Acceleration



◇ Vertical Installation

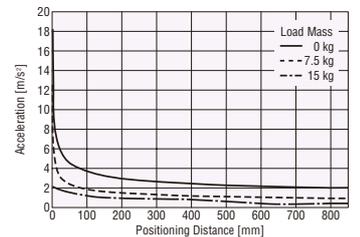
● Positioning Distance – Operating Speed



Maximum Speed by Stroke

Stroke [mm]	Max. Speed [mm/s]
50~650	600
700	550
750	470
800	420
850	360

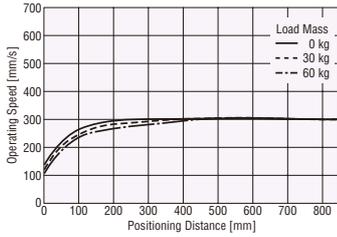
● Positioning Distance – Acceleration



● **EZS6E□-K** (Lead 6 mm, 24 VDC)

◇ Horizontal Installation

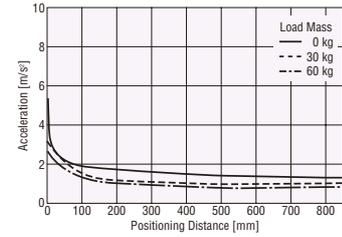
● Positioning Distance – Operating Speed



Maximum Speed by Stroke

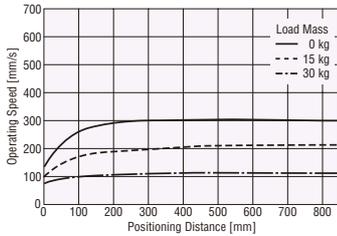
Stroke [mm]	Max. Speed [mm/s]
50~650	300
700	260
750	230
800	200
850	180

● Positioning Distance – Acceleration



◇ Vertical Installation

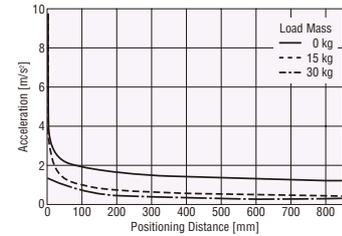
● Positioning Distance – Operating Speed



Maximum Speed by Stroke

Stroke [mm]	Max. Speed [mm/s]
50~650	300
700	260
750	230
800	200
850	180

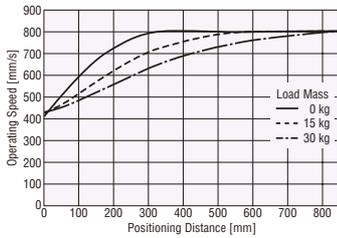
● Positioning Distance – Acceleration



● **EZS6D□-C** (Lead 12 mm, Single-Phase 200-230 VAC)

◇ Horizontal Installation

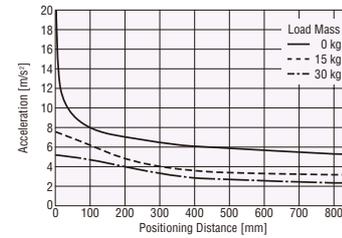
● Positioning Distance – Operating Speed



Maximum Speed by Stroke

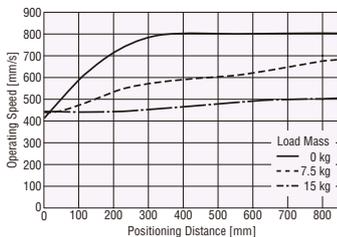
Stroke [mm]	Max. Speed [mm/s]
50~600	800
650	640
700	550
750	470
800	420
850	360

● Positioning Distance – Acceleration



◇ Vertical Installation

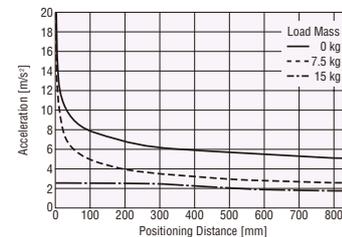
● Positioning Distance – Operating Speed



Maximum Speed by Stroke

Stroke [mm]	Max. Speed [mm/s]
50~600	800
650	640
700	550
750	470
800	420
850	360

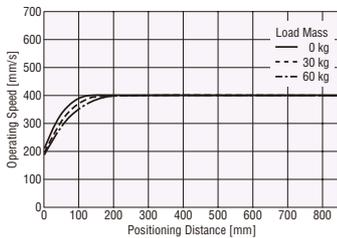
● Positioning Distance – Acceleration



● **EZS6E□-C** (Lead 6 mm, Single-Phase 200-230 VAC)

◇ Horizontal Installation

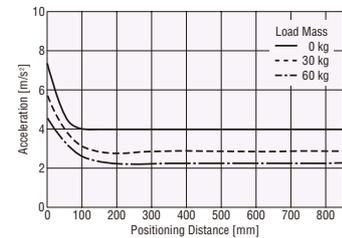
● Positioning Distance – Operating Speed



Maximum Speed by Stroke

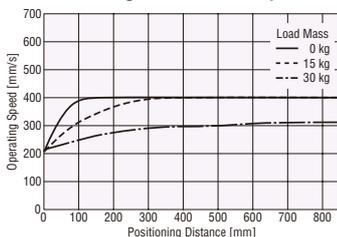
Stroke [mm]	Max. Speed [mm/s]
50~550	400
600	350
650	300
700	260
750	230
800	200
850	180

● Positioning Distance – Acceleration



◇ Vertical Installation

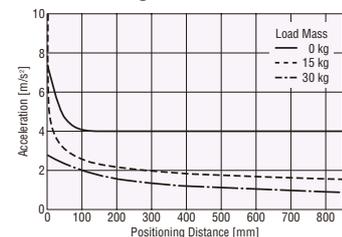
● Positioning Distance – Operating Speed



Maximum Speed by Stroke

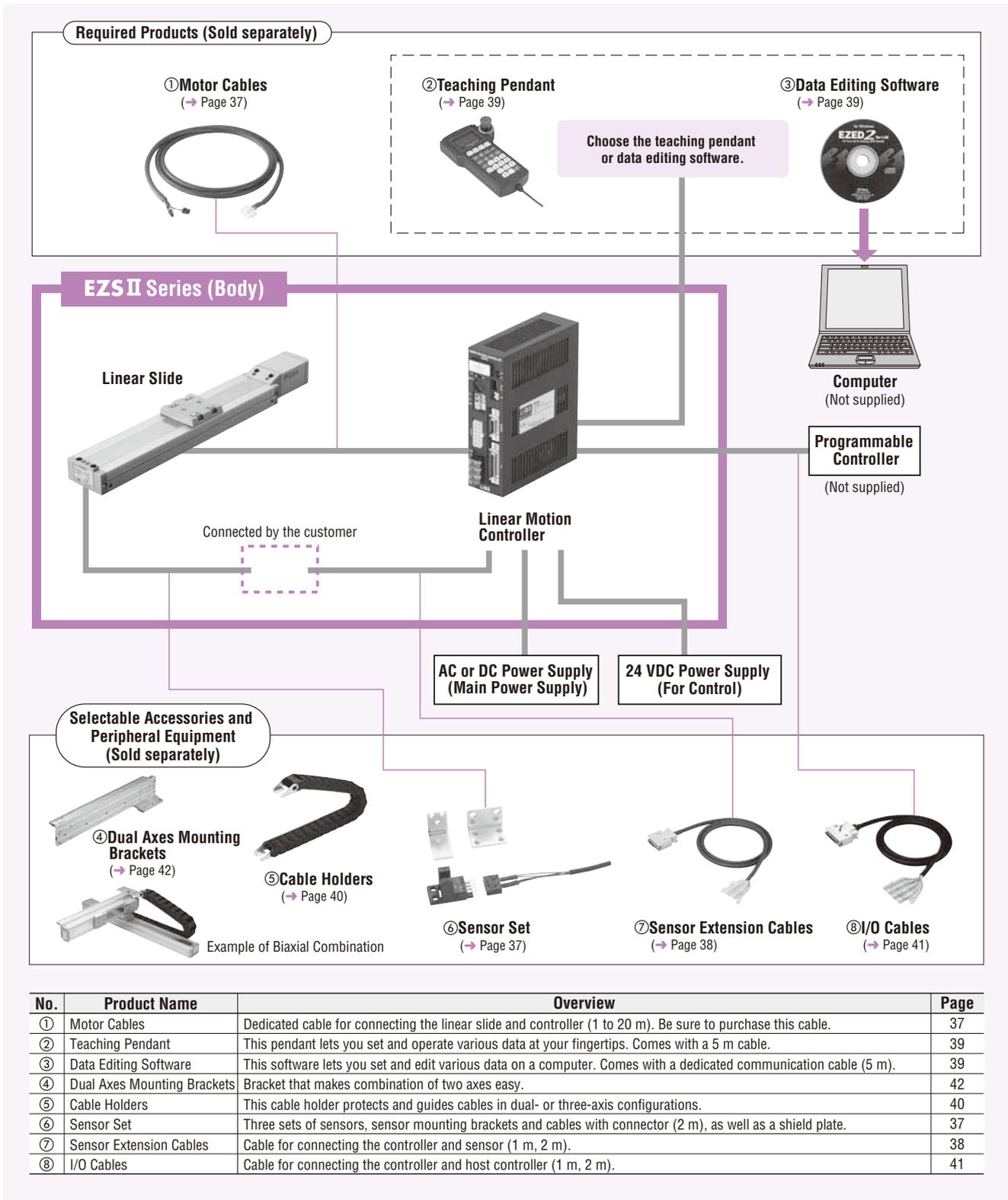
Stroke [mm]	Max. Speed [mm/s]
50~550	400
600	350
650	300
700	260
750	230
800	200
850	180

● Positioning Distance – Acceleration



# System Configuration

## Controller Mode



### Example of System Configuration

(Body)

(Sold separately)

(Sold separately)

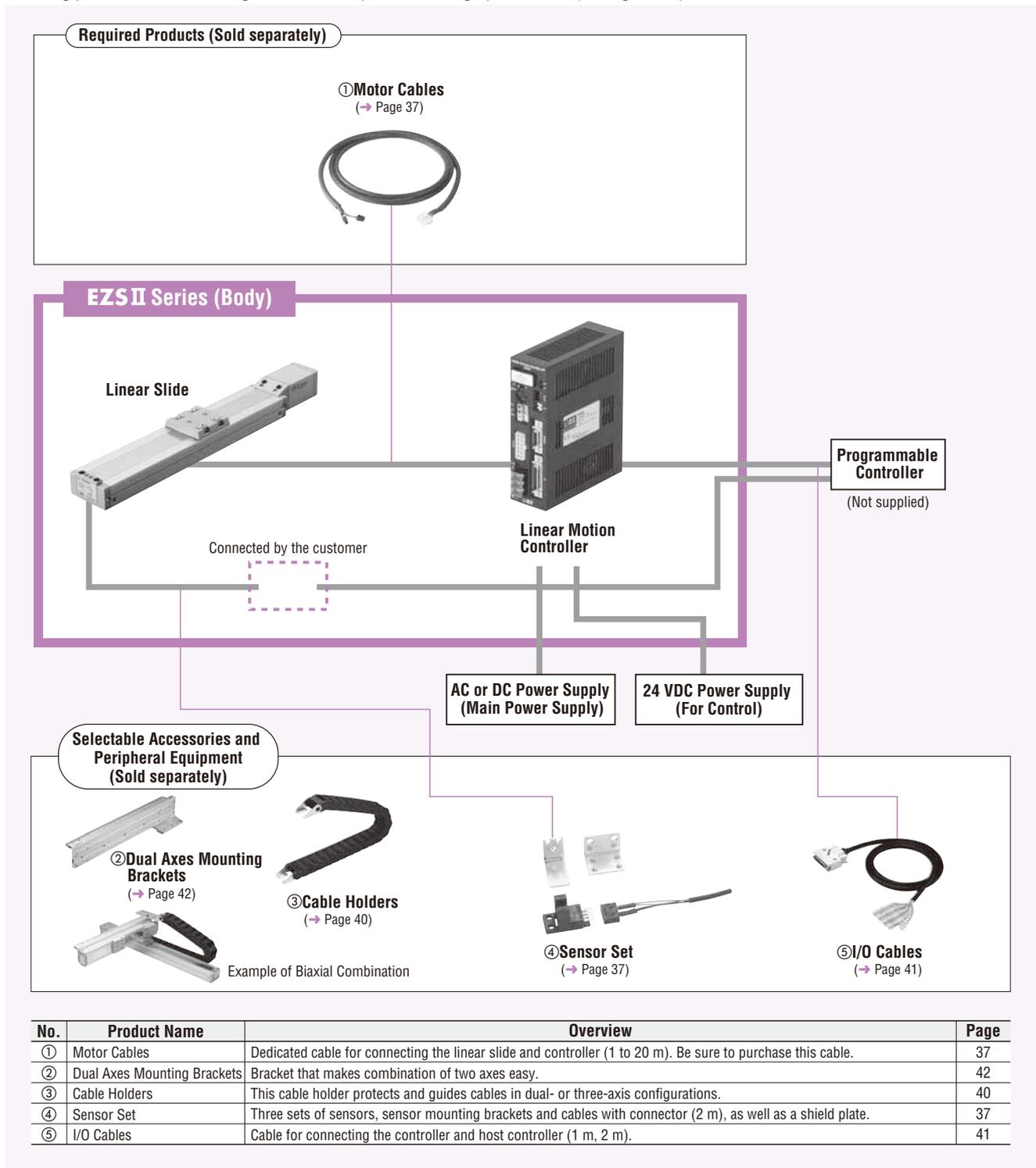
<b>EZS II Series</b>	<b>Motor Cable (2 m)</b>	<b>Teaching Pendant</b>	+	<b>I/O Cable (1 m)</b>	<b>Sensor Extension Cable* (2 m)</b>	<b>Sensor Set*</b>
<b>EZS3E005-C</b>	<b>CC020ES-2</b>	<b>EZT1</b>		<b>CC36D1-1</b>	<b>CC20D2-1</b>	<b>PAES-SY</b>

\* Not required if return to home operation is performed without sensors.

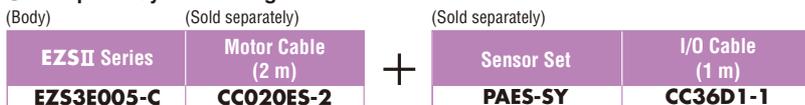
The system configuration shown above is an example. Other combinations are available.

● **Driver Mode**

When performing return to home operation using the linear motion controller, refer to system configuration on page 14. Teaching pendant or data editing software is required to change parameters (I/O logic, etc.) of the linear motion controller.



● **Example of System Configuration**



● The system configuration shown above is an example. Other combinations are available.

Note:

● Sensorless return to home operation is not available.

## Product Number Code

# EZS 3 D 050 M - K

①      ②      ③      ④      ⑤      ⑥

①	Series <b>EZS: EZSII</b> Series
②	Linear Slide Size <b>3</b> : Width: 54 mm Height: 50 mm <b>4</b> : Width: 74 mm Height: 50 mm <b>6</b> : Width: 74 mm Height: 66.5 mm
③	Lead <b>D</b> : 12 mm <b>E</b> : 6 mm
④	Stroke <b>005</b> : 50 mm <b>010</b> : 100 mm <b>015</b> : 150 mm <b>020</b> : 200 mm <b>025</b> : 250 mm <b>030</b> : 300 mm <b>035</b> : 350 mm <b>040</b> : 400 mm <b>045</b> : 450 mm <b>050</b> : 500 mm <b>055</b> : 550 mm <b>060</b> : 600 mm <b>065</b> : 650 mm <b>070</b> : 700 mm <b>075</b> : 750 mm <b>080</b> : 800 mm <b>085</b> : 850 mm
⑤	Electromagnetic Brake    None: Without Electromagnetic Brake <b>M</b> : With Electromagnetic Brake
⑥	Power Supply Input <b>K</b> : 24 VDC <b>A</b> : Single-Phase 100-115 VAC <b>C</b> : Single-Phase 200-230 VAC

## Product Line

### EZS3

Stroke	Without Electromagnetic Brake			With Electromagnetic Brake		
	24 VDC	Single-Phase 100-115 VAC <sup>①</sup>	Single-Phase 200-230 VAC	24 VDC	Single-Phase 100-115 VAC <sup>①</sup>	Single-Phase 200-230 VAC
	Model	Model	Model	Model	Model	Model
50 mm	<b>EZS3</b> □ <b>005</b> -K	<b>EZS3</b> □ <b>005</b> -A	<b>EZS3</b> □ <b>005</b> -C	<b>EZS3</b> □ <b>005M</b> -K	<b>EZS3</b> □ <b>005M</b> -A	<b>EZS3</b> □ <b>005M</b> -C
100 mm	<b>EZS3</b> □ <b>010</b> -K	<b>EZS3</b> □ <b>010</b> -A	<b>EZS3</b> □ <b>010</b> -C	<b>EZS3</b> □ <b>010M</b> -K	<b>EZS3</b> □ <b>010M</b> -A	<b>EZS3</b> □ <b>010M</b> -C
150 mm	<b>EZS3</b> □ <b>015</b> -K	<b>EZS3</b> □ <b>015</b> -A	<b>EZS3</b> □ <b>015</b> -C	<b>EZS3</b> □ <b>015M</b> -K	<b>EZS3</b> □ <b>015M</b> -A	<b>EZS3</b> □ <b>015M</b> -C
200 mm	<b>EZS3</b> □ <b>020</b> -K	<b>EZS3</b> □ <b>020</b> -A	<b>EZS3</b> □ <b>020</b> -C	<b>EZS3</b> □ <b>020M</b> -K	<b>EZS3</b> □ <b>020M</b> -A	<b>EZS3</b> □ <b>020M</b> -C
250 mm	<b>EZS3</b> □ <b>025</b> -K	<b>EZS3</b> □ <b>025</b> -A	<b>EZS3</b> □ <b>025</b> -C	<b>EZS3</b> □ <b>025M</b> -K	<b>EZS3</b> □ <b>025M</b> -A	<b>EZS3</b> □ <b>025M</b> -C
300 mm	<b>EZS3</b> □ <b>030</b> -K	<b>EZS3</b> □ <b>030</b> -A	<b>EZS3</b> □ <b>030</b> -C	<b>EZS3</b> □ <b>030M</b> -K	<b>EZS3</b> □ <b>030M</b> -A	<b>EZS3</b> □ <b>030M</b> -C
350 mm	<b>EZS3</b> □ <b>035</b> -K	<b>EZS3</b> □ <b>035</b> -A	<b>EZS3</b> □ <b>035</b> -C	<b>EZS3</b> □ <b>035M</b> -K	<b>EZS3</b> □ <b>035M</b> -A	<b>EZS3</b> □ <b>035M</b> -C
400 mm	<b>EZS3</b> □ <b>040</b> -K	<b>EZS3</b> □ <b>040</b> -A	<b>EZS3</b> □ <b>040</b> -C	<b>EZS3</b> □ <b>040M</b> -K	<b>EZS3</b> □ <b>040M</b> -A	<b>EZS3</b> □ <b>040M</b> -C
450 mm	<b>EZS3</b> □ <b>045</b> -K	<b>EZS3</b> □ <b>045</b> -A	<b>EZS3</b> □ <b>045</b> -C	<b>EZS3</b> □ <b>045M</b> -K	<b>EZS3</b> □ <b>045M</b> -A	<b>EZS3</b> □ <b>045M</b> -C
500 mm	<b>EZS3</b> □ <b>050</b> -K	<b>EZS3</b> □ <b>050</b> -A	<b>EZS3</b> □ <b>050</b> -C	<b>EZS3</b> □ <b>050M</b> -K	<b>EZS3</b> □ <b>050M</b> -A	<b>EZS3</b> □ <b>050M</b> -C
550 mm	<b>EZS3</b> □ <b>055</b> -K	<b>EZS3</b> □ <b>055</b> -A	<b>EZS3</b> □ <b>055</b> -C	<b>EZS3</b> □ <b>055M</b> -K	<b>EZS3</b> □ <b>055M</b> -A	<b>EZS3</b> □ <b>055M</b> -C
600 mm	<b>EZS3</b> □ <b>060</b> -K	<b>EZS3</b> □ <b>060</b> -A	<b>EZS3</b> □ <b>060</b> -C	<b>EZS3</b> □ <b>060M</b> -K	<b>EZS3</b> □ <b>060M</b> -A	<b>EZS3</b> □ <b>060M</b> -C
650 mm	<b>EZS3</b> □ <b>065</b> -K	<b>EZS3</b> □ <b>065</b> -A	<b>EZS3</b> □ <b>065</b> -C	<b>EZS3</b> □ <b>065M</b> -K	<b>EZS3</b> □ <b>065M</b> -A	<b>EZS3</b> □ <b>065M</b> -C
700 mm	<b>EZS3</b> □ <b>070</b> -K	<b>EZS3</b> □ <b>070</b> -A	<b>EZS3</b> □ <b>070</b> -C	<b>EZS3</b> □ <b>070M</b> -K	<b>EZS3</b> □ <b>070M</b> -A	<b>EZS3</b> □ <b>070M</b> -C

● Enter **D** (12 mm) or **E** (6 mm) (lead length) in the box (□) within the model name.

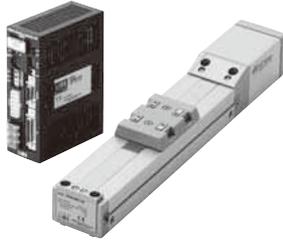
\* For the single-phase 100-115 VAC models, please contact the nearest Oriental Motor sales office.

### EZS4

Stroke	Without Electromagnetic Brake			With Electromagnetic Brake		
	24 VDC	Single-Phase 100-115 VAC <sup>①</sup>	Single-Phase 200-230 VAC	24 VDC	Single-Phase 100-115 VAC <sup>①</sup>	Single-Phase 200-230 VAC
	Model	Model	Model	Model	Model	Model
50 mm	<b>EZS4</b> □ <b>005</b> -K	<b>EZS4</b> □ <b>005</b> -A	<b>EZS4</b> □ <b>005</b> -C	<b>EZS4</b> □ <b>005M</b> -K	<b>EZS4</b> □ <b>005M</b> -A	<b>EZS4</b> □ <b>005M</b> -C
100 mm	<b>EZS4</b> □ <b>010</b> -K	<b>EZS4</b> □ <b>010</b> -A	<b>EZS4</b> □ <b>010</b> -C	<b>EZS4</b> □ <b>010M</b> -K	<b>EZS4</b> □ <b>010M</b> -A	<b>EZS4</b> □ <b>010M</b> -C
150 mm	<b>EZS4</b> □ <b>015</b> -K	<b>EZS4</b> □ <b>015</b> -A	<b>EZS4</b> □ <b>015</b> -C	<b>EZS4</b> □ <b>015M</b> -K	<b>EZS4</b> □ <b>015M</b> -A	<b>EZS4</b> □ <b>015M</b> -C
200 mm	<b>EZS4</b> □ <b>020</b> -K	<b>EZS4</b> □ <b>020</b> -A	<b>EZS4</b> □ <b>020</b> -C	<b>EZS4</b> □ <b>020M</b> -K	<b>EZS4</b> □ <b>020M</b> -A	<b>EZS4</b> □ <b>020M</b> -C
250 mm	<b>EZS4</b> □ <b>025</b> -K	<b>EZS4</b> □ <b>025</b> -A	<b>EZS4</b> □ <b>025</b> -C	<b>EZS4</b> □ <b>025M</b> -K	<b>EZS4</b> □ <b>025M</b> -A	<b>EZS4</b> □ <b>025M</b> -C
300 mm	<b>EZS4</b> □ <b>030</b> -K	<b>EZS4</b> □ <b>030</b> -A	<b>EZS4</b> □ <b>030</b> -C	<b>EZS4</b> □ <b>030M</b> -K	<b>EZS4</b> □ <b>030M</b> -A	<b>EZS4</b> □ <b>030M</b> -C
350 mm	<b>EZS4</b> □ <b>035</b> -K	<b>EZS4</b> □ <b>035</b> -A	<b>EZS4</b> □ <b>035</b> -C	<b>EZS4</b> □ <b>035M</b> -K	<b>EZS4</b> □ <b>035M</b> -A	<b>EZS4</b> □ <b>035M</b> -C
400 mm	<b>EZS4</b> □ <b>040</b> -K	<b>EZS4</b> □ <b>040</b> -A	<b>EZS4</b> □ <b>040</b> -C	<b>EZS4</b> □ <b>040M</b> -K	<b>EZS4</b> □ <b>040M</b> -A	<b>EZS4</b> □ <b>040M</b> -C
450 mm	<b>EZS4</b> □ <b>045</b> -K	<b>EZS4</b> □ <b>045</b> -A	<b>EZS4</b> □ <b>045</b> -C	<b>EZS4</b> □ <b>045M</b> -K	<b>EZS4</b> □ <b>045M</b> -A	<b>EZS4</b> □ <b>045M</b> -C
500 mm	<b>EZS4</b> □ <b>050</b> -K	<b>EZS4</b> □ <b>050</b> -A	<b>EZS4</b> □ <b>050</b> -C	<b>EZS4</b> □ <b>050M</b> -K	<b>EZS4</b> □ <b>050M</b> -A	<b>EZS4</b> □ <b>050M</b> -C
550 mm	<b>EZS4</b> □ <b>055</b> -K	<b>EZS4</b> □ <b>055</b> -A	<b>EZS4</b> □ <b>055</b> -C	<b>EZS4</b> □ <b>055M</b> -K	<b>EZS4</b> □ <b>055M</b> -A	<b>EZS4</b> □ <b>055M</b> -C
600 mm	<b>EZS4</b> □ <b>060</b> -K	<b>EZS4</b> □ <b>060</b> -A	<b>EZS4</b> □ <b>060</b> -C	<b>EZS4</b> □ <b>060M</b> -K	<b>EZS4</b> □ <b>060M</b> -A	<b>EZS4</b> □ <b>060M</b> -C
650 mm	<b>EZS4</b> □ <b>065</b> -K	<b>EZS4</b> □ <b>065</b> -A	<b>EZS4</b> □ <b>065</b> -C	<b>EZS4</b> □ <b>065M</b> -K	<b>EZS4</b> □ <b>065M</b> -A	<b>EZS4</b> □ <b>065M</b> -C
700 mm	<b>EZS4</b> □ <b>070</b> -K	<b>EZS4</b> □ <b>070</b> -A	<b>EZS4</b> □ <b>070</b> -C	<b>EZS4</b> □ <b>070M</b> -K	<b>EZS4</b> □ <b>070M</b> -A	<b>EZS4</b> □ <b>070M</b> -C

● Enter **D** (12 mm) or **E** (6 mm) (lead length) in the box (□) within the model name.

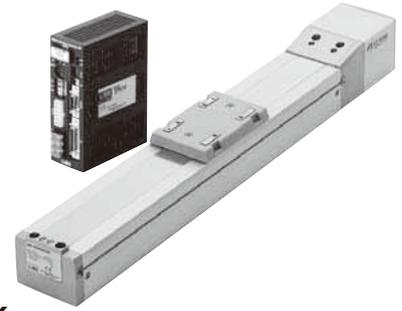
\* For the single-phase 100-115 VAC models, please contact the nearest Oriental Motor sales office.



**EZS3**



**EZS4**



**EZS6**

● **EZS6**

Stroke	Without Electromagnetic Brake			With Electromagnetic Brake		
	24 VDC	Single-Phase 100-115 VAC*	Single-Phase 200-230 VAC	24 VDC	Single-Phase 100-115 VAC*	Single-Phase 200-230 VAC
	Model	Model	Model	Model	Model	Model
50 mm	EZS6□005-K	EZS6□005-A	EZS6□005-C	EZS6□005M-K	EZS6□005M-A	EZS6□005M-C
100 mm	EZS6□010-K	EZS6□010-A	EZS6□010-C	EZS6□010M-K	EZS6□010M-A	EZS6□010M-C
150 mm	EZS6□015-K	EZS6□015-A	EZS6□015-C	EZS6□015M-K	EZS6□015M-A	EZS6□015M-C
200 mm	EZS6□020-K	EZS6□020-A	EZS6□020-C	EZS6□020M-K	EZS6□020M-A	EZS6□020M-C
250 mm	EZS6□025-K	EZS6□025-A	EZS6□025-C	EZS6□025M-K	EZS6□025M-A	EZS6□025M-C
300 mm	EZS6□030-K	EZS6□030-A	EZS6□030-C	EZS6□030M-K	EZS6□030M-A	EZS6□030M-C
350 mm	EZS6□035-K	EZS6□035-A	EZS6□035-C	EZS6□035M-K	EZS6□035M-A	EZS6□035M-C
400 mm	EZS6□040-K	EZS6□040-A	EZS6□040-C	EZS6□040M-K	EZS6□040M-A	EZS6□040M-C
450 mm	EZS6□045-K	EZS6□045-A	EZS6□045-C	EZS6□045M-K	EZS6□045M-A	EZS6□045M-C
500 mm	EZS6□050-K	EZS6□050-A	EZS6□050-C	EZS6□050M-K	EZS6□050M-A	EZS6□050M-C
550 mm	EZS6□055-K	EZS6□055-A	EZS6□055-C	EZS6□055M-K	EZS6□055M-A	EZS6□055M-C
600 mm	EZS6□060-K	EZS6□060-A	EZS6□060-C	EZS6□060M-K	EZS6□060M-A	EZS6□060M-C
650 mm	EZS6□065-K	EZS6□065-A	EZS6□065-C	EZS6□065M-K	EZS6□065M-A	EZS6□065M-C
700 mm	EZS6□070-K	EZS6□070-A	EZS6□070-C	EZS6□070M-K	EZS6□070M-A	EZS6□070M-C
750 mm	EZS6□075-K	EZS6□075-A	EZS6□075-C	EZS6□075M-K	EZS6□075M-A	EZS6□075M-C
800 mm	EZS6□080-K	EZS6□080-A	EZS6□080-C	EZS6□080M-K	EZS6□080M-A	EZS6□080M-C
850 mm	EZS6□085-K	EZS6□085-A	EZS6□085-C	EZS6□085M-K	EZS6□085M-A	EZS6□085M-C

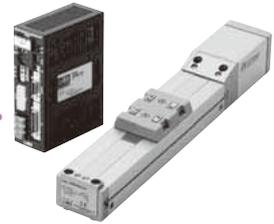
● Enter **D** (12 mm) or **E** (6 mm) (lead length) in the box (□) within the model name.

\* For the single-phase 100-115 VAC models, please contact the nearest Oriental Motor sales office.

The following items are included in each product.  
 Linear Slide, Allen-Head Bolt for Affixing Linear Slide, Controller, Mounting Bracket for Controller,  
 User I/O Connector, Sensor I/O Connector, Operating Manual

# Adopting $\alpha$ STEP Motor, Rolled Ball Screw Specification

## EZS3: 54 mm (W) × 50 mm (H), 24 VDC



Maximum Transportable Mass: Horizontal 15 kg/Vertical 7 kg  
Stroke: 50 to 700 mm (in 50 mm increments)

### Specifications of Linear Slide (RoHS)



Drive Method	Rolled Ball Screw	Repetitive Positioning Accuracy [mm]	±0.02	Resolution [mm]	0.01	Traveling Parallelism [mm]	0.03*	Maximum Load Moment [N·m]	Mp: 4.2 Mv: 4.2 Ma: 10.5
Model	Lead [mm]	Transportable Mass [kg]		Maximum Speed (Stroke) [mm/s]				Thrust [N]	Electromagnetic Brake Holding Force [N]
EZS3D□-K	12	~7.5	—	600	550	460	400	~43	—
EZS3D□M-K			~3.5						43
EZS3E□-K	6	~15	—	300	270	220	200	~86	—
EZS3E□M-K			~7						86

- Enter the stroke length in the box (□) within the model name.
- \* This applies when the linear slide is installed from the base surface.

### Product Number Code

## EZS 3 D 050 M - K

- ① ② ③ ④ ⑤ ⑥

①	Series <b>EZS</b> : <b>EZSII</b> Series
②	Linear Slide Size <b>3</b> : Width: 54 mm Height: 50 mm
③	Lead <b>D</b> : 12 mm <b>E</b> : 6 mm
④	Stroke <b>005</b> (50 mm) ~ <b>070</b> (700 mm)
⑤	Electromagnetic Brake None: Without Electromagnetic Brake <b>M</b> : With Electromagnetic Brake
⑥	Power Supply Input <b>K</b> : 24 VDC

### Linear Slide/Controller Combinations

Model names for linear slide and controller combinations are shown below.

Electromagnetic Brake	Model	Linear Slide Model	Controller Model
Not equipped	<b>EZS3D</b> □-K	EZSM3D□K	ESMC-K2
	<b>EZS3E</b> □-K	EZSM3E□K	
Equipped	<b>EZS3D</b> □M-K	EZSM3D□MK	
	<b>EZS3E</b> □M-K	EZSM3E□MK	

- Enter the stroke length in the box (□) within the model name.

### Positioning Distance – Positioning Time

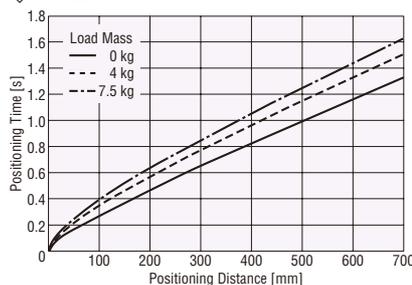
Check the (approximate) positioning time from the positioning distance.

As a rough guideline, the positioning time by the linear slide corresponds to the positioning time calculated from the graph, multiplied by the positioning time coefficient corresponding to the applicable stroke.

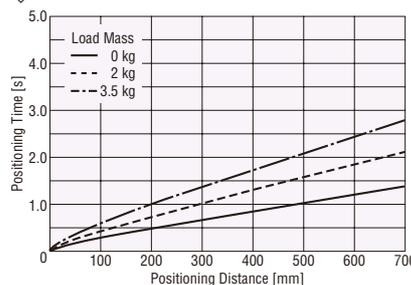
See page 10 for operation speed and acceleration.

#### ● EZS3D (Lead: 12 mm)

##### ◇ Horizontal Installation



##### ◇ Vertical Installation

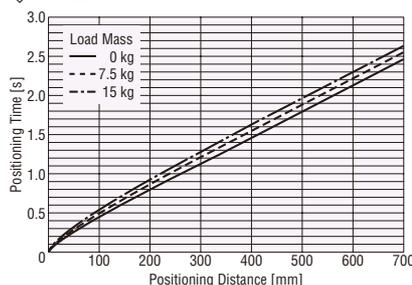


#### Positioning Time Coefficient

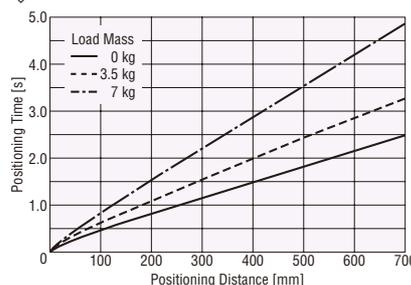
Stroke [mm]	Load Mass					
	Horizontal Installation			Vertical Installation		
	0 kg	4 kg	7.5 kg	0 kg	2 kg	3.5 kg
50~550	1.0	1.0	1.0	1.0	1.0	1.0
600	1.0	1.0	1.0	1.0	1.0	1.0
650	1.2	1.1	1.1	1.2	1.0	1.0
700	1.4	1.2	1.2	1.3	1.0	1.0

#### ● EZS3E (Lead: 6 mm)

##### ◇ Horizontal Installation



##### ◇ Vertical Installation



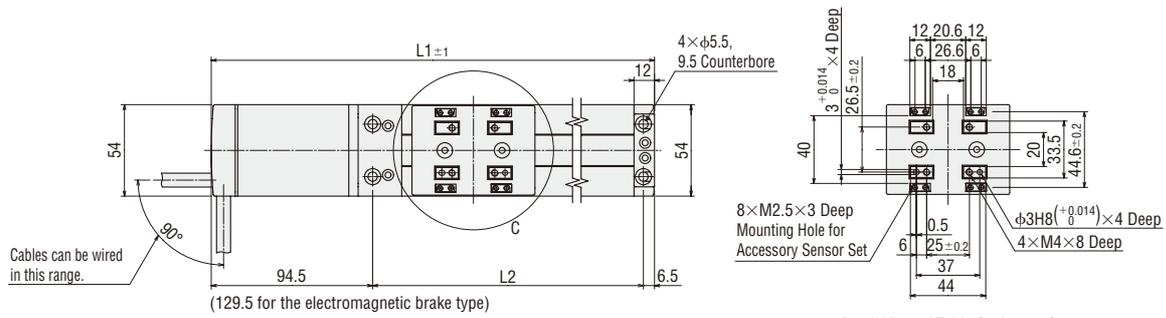
#### Positioning Time Coefficient

Stroke [mm]	Load Mass					
	Horizontal Installation			Vertical Installation		
	0 kg	7.5 kg	15 kg	0 kg	3.5 kg	7 kg
50~550	1.0	1.0	1.0	1.0	1.0	1.0
600	1.1	1.1	1.1	1.1	1.0	1.0
650	1.3	1.3	1.2	1.3	1.0	1.0
700	1.4	1.4	1.4	1.4	1.1	1.0

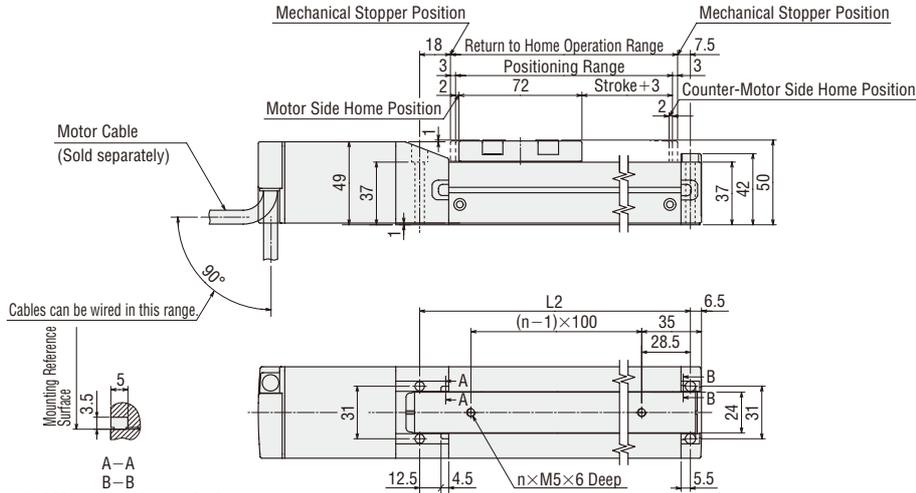
#### Notes:

- The positioning time in the graph does not include the settling time. Use a settling time of 0.15 s as a reference.
- The starting speed should be 6 mm/s or less.

## ■ Dimensions of Linear Slide (Unit = mm)



Detail View of Table Surface at C



Detail of Mounting Reference Surface

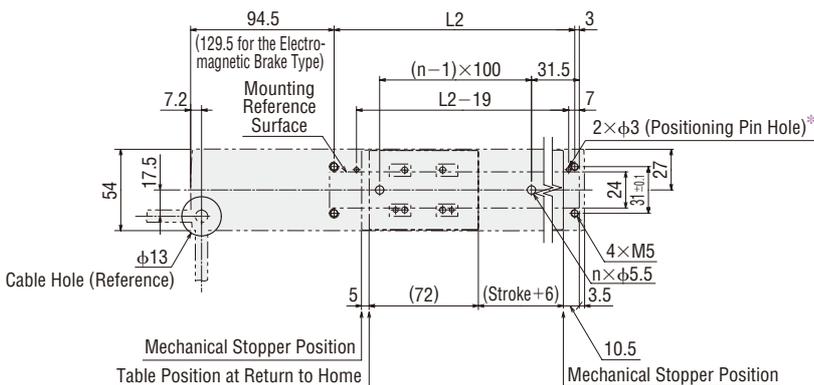
Number of Holes (n)

Stroke [mm]	n
50, 100	2
150, 200	3
250, 300	4
350, 400	5
450, 500	6
550, 600	7
650, 700	8

Linear Slide Model: EZSM3D□K, EZSM3E□K (Without Electromagnetic Brake)  
EZSM3D□MK, EZSM3E□MK (With Electromagnetic Brake)

	Electromagnetic Brake	Numbers Specifiable in the Box (□) within the Linear Slide Model Name														
		005	010	015	020	025	030	035	040	045	050	055	060	065	070	
Stroke	Not Equipped/Equipped	50	100	150	200	250	300	350	400	450	500	550	600	650	700	
L1	Not Equipped	259.5	309.5	359.5	409.5	459.5	509.5	559.5	609.5	659.5	709.5	759.5	809.5	859.5	909.5	
	Equipped	294.5	344.5	394.5	444.5	494.5	544.5	594.5	644.5	694.5	744.5	794.5	844.5	894.5	944.5	
L2	Not Equipped/Equipped	158.5	208.5	258.5	308.5	358.5	408.5	458.5	508.5	558.5	608.5	658.5	708.5	758.5	808.5	
Mass [kg]	Not Equipped	1.4	1.5	1.7	1.8	2.0	2.1	2.3	2.4	2.6	2.7	2.9	3.0	3.2	3.3	
	Equipped	1.6	1.7	1.9	2.0	2.2	2.3	2.5	2.6	2.8	2.9	3.1	3.2	3.4	3.5	

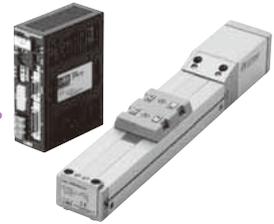
## ■ Dimensions for Linear Slide Installation (Unit = mm)



\* The mounting reference surface can be set on either side.  
The above figure assumes that the linear slide is mounted on its top surface.

# Adopting $\alpha$ STEP Motor, Rolled Ball Screw Specification

## EZS3: 54 mm (W) × 50 mm (H), Single-Phase 200-230 VAC



Maximum Transportable Mass: Horizontal 15 kg/Vertical 7 kg  
Stroke: 50 to 700 mm (in 50 mm increments)

### Specifications of Linear Slide (RoHS)



Drive Method	Rolled Ball Screw	Repetitive Positioning Accuracy [mm]	±0.02	Resolution [mm]	0.01	Traveling Parallelism [mm]	0.03*	Maximum Load Moment [N·m]	Mp: 4.2 Mv: 4.2 Ma: 10.5	
Model	Lead [mm]	Transportable Mass [kg]		Maximum Speed (Stroke) [mm/s]					Thrust [N]	Electromagnetic Brake Holding Force [N]
		Horizontal	Vertical	50~500 mm	550 mm	600 mm	650 mm	700 mm		
EZS3D□-C	12	~7.5	-	800	650	550	460	400	~43	-
EZS3D□M-C			~3.5							43
EZS3E□-C	6	~15	-	400	320	270	220	200	~86	-
EZS3E□M-C			~7							86

- Enter the stroke length in the box (□) within the model name.
- For the single-phase 100-115 VAC models, please contact the nearest Oriental Motor sales office.
- \* This applies when the linear slide is installed from the base surface.

### Product Number Code

# EZS 3 D 050 M - C

- ① ② ③ ④ ⑤ ⑥

①	Series <b>EZS: EZSII</b> Series
②	Linear Slide Size <b>3</b> : Width: 54 mm Height: 50 mm
③	Lead <b>D</b> : 12 mm <b>E</b> : 6 mm
④	Stroke <b>005</b> (50 mm) ~ <b>070</b> (700 mm)
⑤	Electromagnetic Brake None: Without Electromagnetic Brake <b>M</b> : With Electromagnetic Brake
⑥	Power Supply Input <b>C</b> : Single-Phase 200-230 VAC

### Linear Slide/Controller Combinations

Model names for linear slide and controller combinations are shown below.

Electromagnetic Brake	Model	Linear Slide Model	Controller Model
Not equipped	<b>EZS3D</b> □-C	EZSM3D□C	ESMC-C2
	<b>EZS3E</b> □-C	EZSM3E□C	
Equipped	<b>EZS3D</b> □M-C	EZSM3D□MC	
	<b>EZS3E</b> □M-C	EZSM3E□MC	

- Enter the stroke length in the box (□) within the model name.

### Positioning Distance – Positioning Time

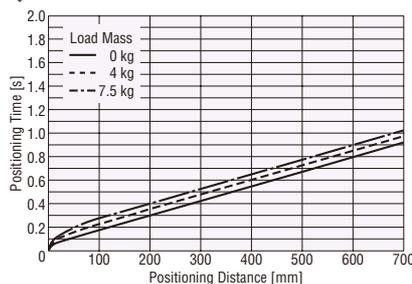
Check the (approximate) positioning time from the positioning distance.

As a rough guideline, the positioning time by the linear slide corresponds to the positioning time calculated from the graph, multiplied by the positioning time coefficient corresponding to the applicable stroke.

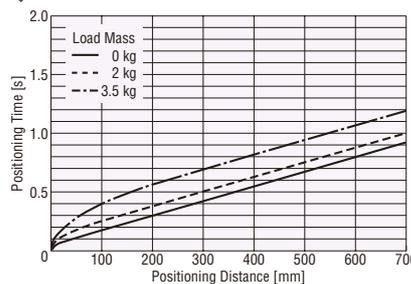
See page 10 for operation speed and acceleration.

#### ● EZS3D (Lead: 12 mm)

##### ◇ Horizontal Installation



##### ◇ Vertical Installation

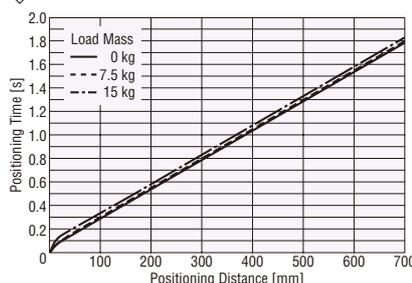


#### Positioning Time Coefficient

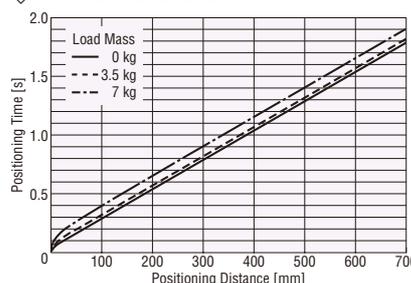
Stroke [mm]	Load Mass					
	Horizontal Installation			Vertical Installation		
	0 kg	4 kg	7.5 kg	0 kg	2 kg	3.5 kg
50~500	1.0	1.0	1.0	1.0	1.0	1.0
550	1.2	1.2	1.2	1.2	1.2	1.1
600	1.4	1.4	1.3	1.4	1.3	1.2
650	1.7	1.6	1.6	1.7	1.6	1.4
700	1.9	1.8	1.8	1.9	1.8	1.6

#### ● EZS3E (Lead: 6 mm)

##### ◇ Horizontal Installation



##### ◇ Vertical Installation



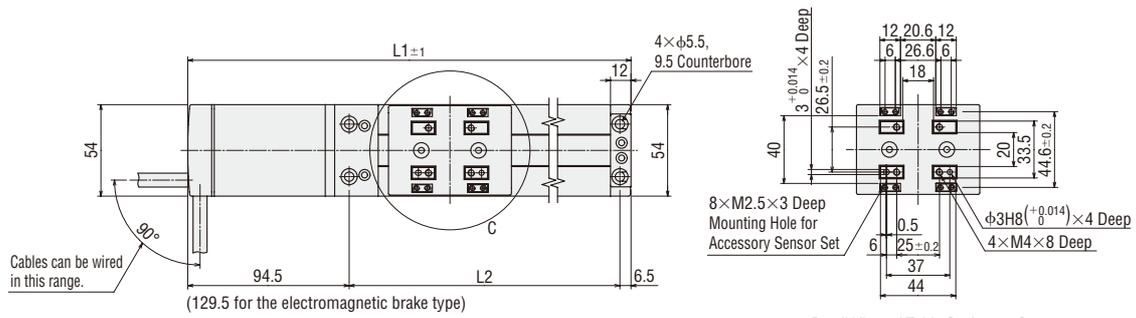
#### Positioning Time Coefficient

Stroke [mm]	Load Mass					
	Horizontal Installation			Vertical Installation		
	0 kg	7.5 kg	15 kg	0 kg	3.5 kg	7 kg
50~500	1.0	1.0	1.0	1.0	1.0	1.0
550	1.2	1.2	1.2	1.2	1.2	1.2
600	1.5	1.4	1.4	1.5	1.4	1.4
650	1.8	1.8	1.8	1.8	1.8	1.7
700	2.0	1.9	1.9	2.0	1.9	1.9

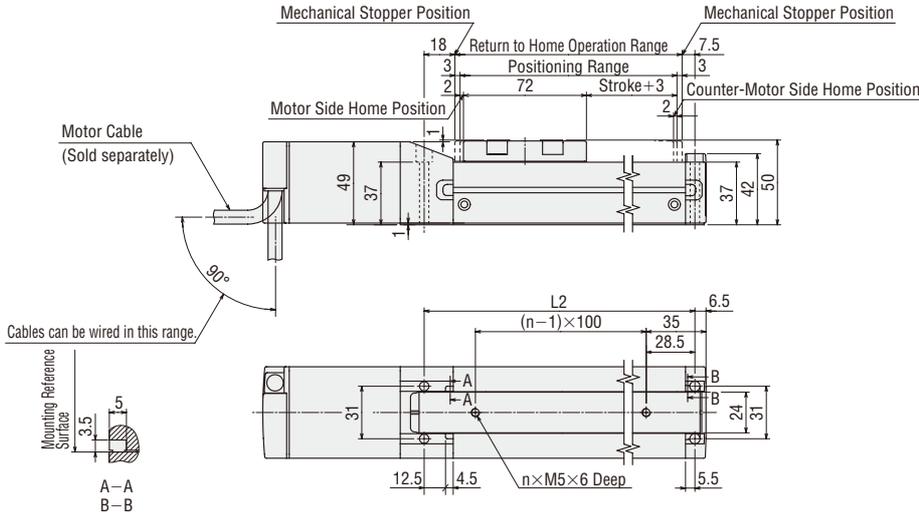
#### Notes:

- The positioning time in the graph does not include the settling time. Use a settling time of 0.15 s as a reference.
- The starting speed should be 6 mm/s or less.

## Dimensions of Linear Slide (Unit = mm)



Detail View of Table Surface at C



Detail of Mounting Reference Surface

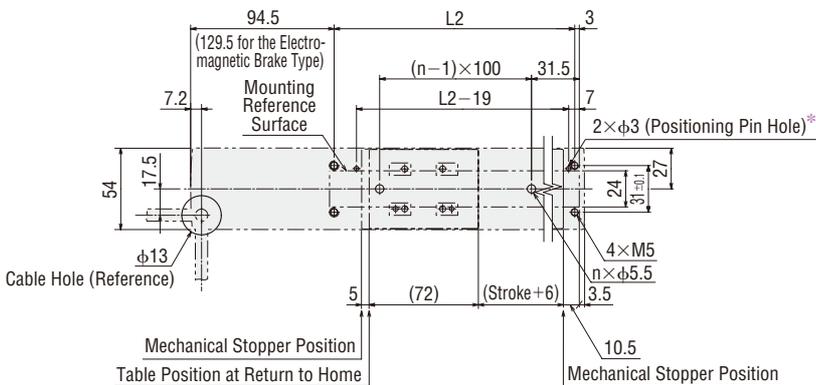
Number of Holes (n)

Stroke [mm]	n
50, 100	2
150, 200	3
250, 300	4
350, 400	5
450, 500	6
550, 600	7
650, 700	8

Linear Slide Model: EZSM3D□C, EZSM3E□C (Without Electromagnetic Brake)  
EZSM3D□MC, EZSM3E□MC (With Electromagnetic Brake)

Stroke	Electromagnetic Brake	Numbers Specifiable in the Box (□) within the Linear Slide Model Name													
		005	010	015	020	025	030	035	040	045	050	055	060	065	070
L1	Not Equipped/Equipped	50	100	150	200	250	300	350	400	450	500	550	600	650	700
	Not Equipped	259.5	309.5	359.5	409.5	459.5	509.5	559.5	609.5	659.5	709.5	759.5	809.5	859.5	909.5
L2	Equipped	294.5	344.5	394.5	444.5	494.5	544.5	594.5	644.5	694.5	744.5	794.5	844.5	894.5	944.5
	Not Equipped/Equipped	158.5	208.5	258.5	308.5	358.5	408.5	458.5	508.5	558.5	608.5	658.5	708.5	758.5	808.5
Mass [kg]	Not Equipped	1.4	1.5	1.7	1.8	2.0	2.1	2.3	2.4	2.6	2.7	2.9	3.0	3.2	3.3
	Equipped	1.6	1.7	1.9	2.0	2.2	2.3	2.5	2.6	2.8	2.9	3.1	3.2	3.4	3.5

## Dimensions for Linear Slide Installation (Unit = mm)



\*The mounting reference surface can be set on either side.  
The above figure assumes that the linear slide is mounted on its top surface.

# Adopting $\alpha$ STEP Motor, Rolled Ball Screw Specification

## EZS4: 74 mm (W) × 50 mm (H), 24 VDC



Maximum Transportable Mass: Horizontal 30 kg/Vertical 14 kg  
Stroke: 50 to 700 mm (in 50 mm increments)

### Specifications of Linear Slide (RoHS)



Drive Method	Rolled Ball Screw	Repetitive Positioning Accuracy [mm]	±0.02	Resolution [mm]	0.01	Traveling Parallelism [mm]	0.03*	Maximum Load Moment [N·m]	M <sub>r</sub> : 8 M <sub>v</sub> : 8 M <sub>a</sub> : 27.8
Model	Lead [mm]	Transportable Mass [kg]		Maximum Speed (Stroke) [mm/s]				Thrust [N]	Electromagnetic Brake Holding Force [N]
		Horizontal	Vertical	50~550 mm	600 mm	650 mm	700 mm		
<b>EZS4D</b> □-K	12	~15	—	600	550	460	400	~70	—
<b>EZS4D</b> □M-K			~7						70
<b>EZS4E</b> □-K	6	~30	—	300	270	220	200	~140	—
<b>EZS4E</b> □M-K			~14						140

- Enter the stroke length in the box (□) within the model name.
- \* This applies when the linear slide is installed from the base surface.

### Product Number Code

## EZS 4 D 050 M - K

- ① ② ③ ④ ⑤ ⑥

①	Series <b>EZS</b> : <b>EZSII</b> Series
②	Linear Slide Size <b>4</b> : Width: 74 mm Height: 50 mm
③	Lead <b>D</b> : 12 mm <b>E</b> : 6 mm
④	Stroke <b>005</b> (50 mm) ~ <b>070</b> (700 mm)
⑤	Electromagnetic Brake None: Without Electromagnetic Brake <b>M</b> : With Electromagnetic Brake
⑥	Power Supply Input <b>K</b> : 24 VDC

### Linear Slide/Controller Combinations

Model names for linear slide and controller combinations are shown below.

Electromagnetic Brake	Model	Linear Slide Model	Controller Model
Not equipped	<b>EZS4D</b> □-K	EZSM4D□K	ESMC-K2
	<b>EZS4E</b> □-K	EZSM4E□K	
Equipped	<b>EZS4D</b> □M-K	EZSM4D□MK	
	<b>EZS4E</b> □M-K	EZSM4E□MK	

- Enter the stroke length in the box (□) within the model name.

### Positioning Distance – Positioning Time

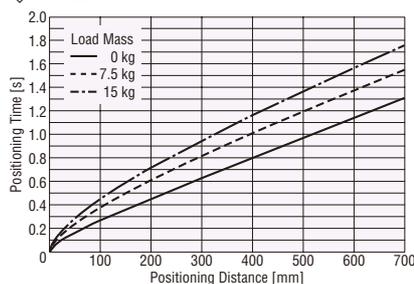
Check the (approximate) positioning time from the positioning distance.

As a rough guideline, the positioning time by the linear slide corresponds to the positioning time calculated from the graph, multiplied by the positioning time coefficient corresponding to the applicable stroke.

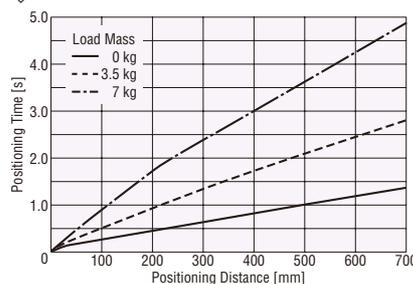
See page 11 for operation speed and acceleration.

#### ● EZS4D (Lead: 12 mm)

##### ◇ Horizontal Installation



##### ◇ Vertical Installation

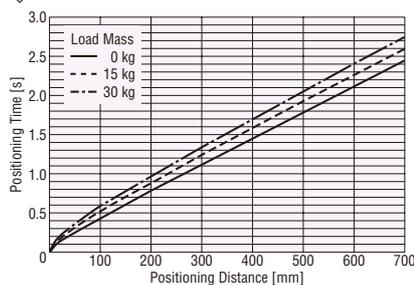


#### Positioning Time Coefficient

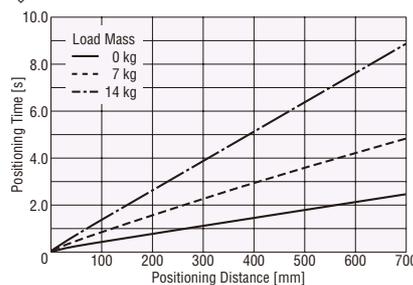
Stroke [mm]	Load Mass					
	Horizontal Installation			Vertical Installation		
	0 kg	7.5 kg	15 kg	0 kg	3.5 kg	7 kg
50~550	1.0	1.0	1.0	1.0	1.0	1.0
600	1.0	1.0	1.0	1.0	1.0	1.0
650	1.2	1.1	1.0	1.2	1.0	1.0
700	1.4	1.1	1.1	1.3	1.0	1.0

#### ● EZS4E (Lead: 6 mm)

##### ◇ Horizontal Installation



##### ◇ Vertical Installation



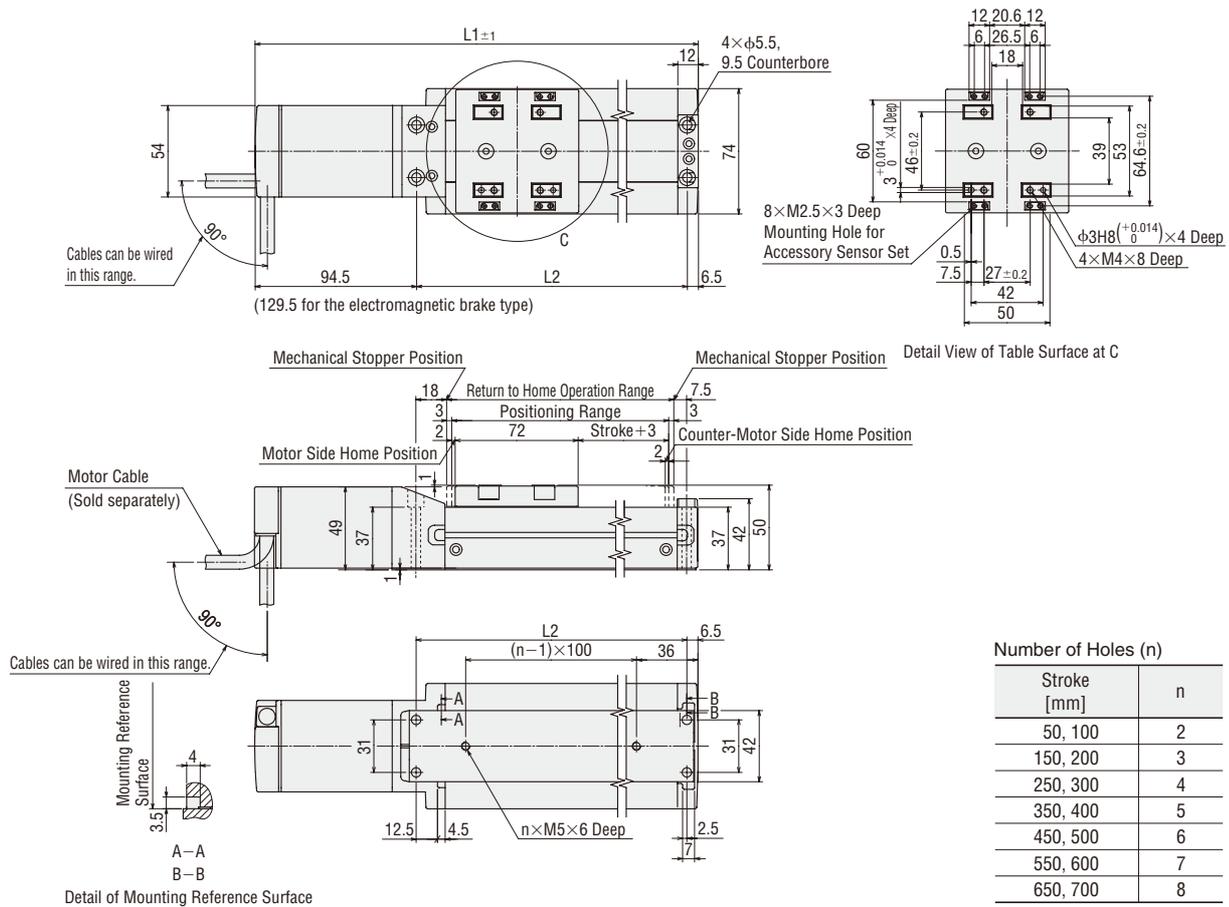
#### Positioning Time Coefficient

Stroke [mm]	Load Mass					
	Horizontal Installation			Vertical Installation		
	0 kg	15 kg	30 kg	0 kg	7 kg	14 kg
50~550	1.0	1.0	1.0	1.0	1.0	1.0
600	1.1	1.1	1.0	1.1	1.0	1.0
650	1.3	1.3	1.2	1.3	1.0	1.0
700	1.4	1.4	1.3	1.4	1.0	1.0

#### Notes:

- The positioning time in the graph does not include the settling time. Use a settling time of 0.15 s as a reference.
- The starting speed should be 6 mm/s or less.

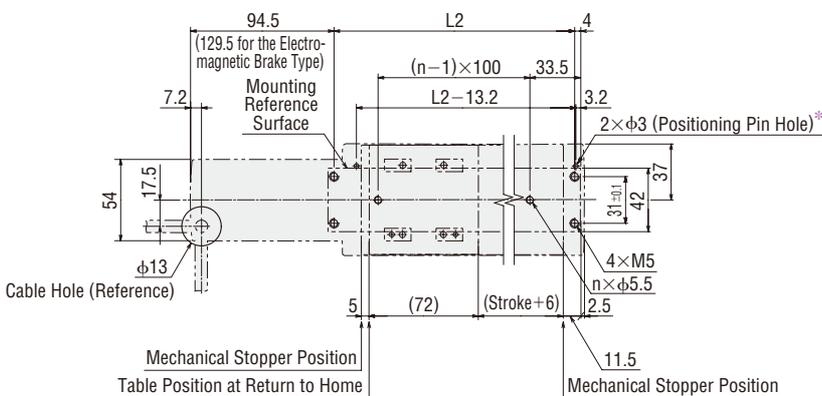
## Dimensions of Linear Slide (Unit = mm)



Linear Slide Model: EZSM4D□K, EZSM4E□K (Without Electromagnetic Brake)  
EZSM4D□MK, EZSM4E□MK (With Electromagnetic Brake)

Stroke	Electromagnetic Brake	Numbers Specifiable in the Box (□) within the Linear Slide Model Name														
		005	010	015	020	025	030	035	040	045	050	055	060	065	070	
L1	Not Equipped/Equipped	50	100	150	200	250	300	350	400	450	500	550	600	650	700	
	Not Equipped	259.5	309.5	359.5	409.5	459.5	509.5	559.5	609.5	659.5	709.5	759.5	809.5	859.5	909.5	
	Equipped	294.5	344.5	394.5	444.5	494.5	544.5	594.5	644.5	694.5	744.5	794.5	844.5	894.5	944.5	
L2	Not Equipped/Equipped	158.5	208.5	258.5	308.5	358.5	408.5	458.5	508.5	558.5	608.5	658.5	708.5	758.5	808.5	
Mass [kg]	Not Equipped	1.8	2.1	2.3	2.5	2.7	3.0	3.2	3.4	3.7	3.9	4.1	4.3	4.6	4.8	
	Equipped	2.0	2.3	2.5	2.7	2.9	3.2	3.4	3.6	3.9	4.1	4.3	4.5	4.8	5.0	

## Dimensions for Linear Slide Installation (Unit = mm)



\* The mounting reference surface can be set on either side.  
The above figure assumes that the linear slide is mounted on its top surface.

# Adopting $\alpha$ STEP Motor, Rolled Ball Screw Specification

## EZS4: 74 mm (W) × 50 mm (H), Single-Phase 200-230 VAC



Maximum Transportable Mass: Horizontal 30 kg/Vertical 14 kg  
Stroke: 50 to 700 mm (in 50 mm increments)

### Specifications of Linear Slide (RoHS)



Drive Method	Rolled Ball Screw	Repetitive Positioning Accuracy [mm]	±0.02	Resolution [mm]	0.01	Traveling Parallelism [mm]	0.03*	Maximum Load Moment [N·m]	M <sub>r</sub> : 8 M <sub>v</sub> : 8 M <sub>c</sub> : 27.8	
Model	Lead [mm]	Transportable Mass [kg]		Maximum Speed (Stroke) [mm/s]					Thrust [N]	Electromagnetic Brake Holding Force [N]
		Horizontal	Vertical	50~500 mm	550 mm	600 mm	650 mm	700 mm		
EZS4D□-C	12	~15	—	800	650	550	460	400	~70	—
EZS4D□M-C			~7							70
EZS4E□-C	6	~30	—	400	320	270	220	200	~140	—
EZS4E□M-C			~14							140

- Enter the stroke length in the box (□) within the model name.
- For the single-phase 100-115 VAC models, please contact the nearest Oriental Motor sales office.
- \* This applies when the linear slide is installed from the base surface.

### Product Number Code

# EZS 4 D 050 M - C

- ① ② ③ ④ ⑤ ⑥

①	Series <b>EZS: EZSII</b> Series
②	Linear Slide Size <b>4</b> : Width: 74 mm Height: 50 mm
③	Lead <b>D</b> : 12 mm <b>E</b> : 6 mm
④	Stroke <b>005</b> (50 mm) ~ <b>070</b> (700 mm)
⑤	Electromagnetic Brake None: Without Electromagnetic Brake <b>M</b> : With Electromagnetic Brake
⑥	Power Supply Input <b>C</b> : Single-Phase 200-230 VAC

### Linear Slide/Controller Combinations

Model names for linear slide and controller combinations are shown below.

Electromagnetic Brake	Model	Linear Slide Model	Controller Model
Not equipped	EZS4D□-C	EZSM4D□C	ESMC-C2
	EZS4E□-C	EZSM4E□C	
Equipped	EZS4D□M-C	EZSM4D□MC	
	EZS4E□M-C	EZSM4E□MC	

- Enter the stroke length in the box (□) within the model name.

### Positioning Distance – Positioning Time

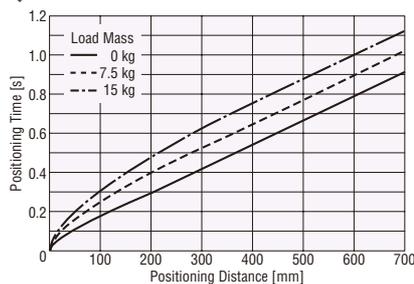
Check the (approximate) positioning time from the positioning distance.

As a rough guideline, the positioning time by the linear slide corresponds to the positioning time calculated from the graph, multiplied by the positioning time coefficient corresponding to the applicable stroke.

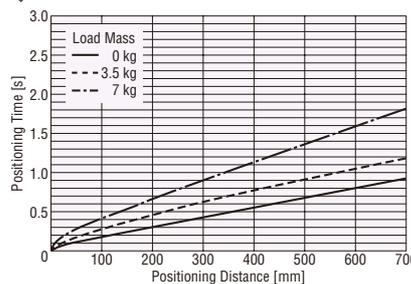
See page 12 for operation speed and acceleration.

#### ● EZS4D (Lead: 12 mm)

##### ◇ Horizontal Installation



##### ◇ Vertical Installation

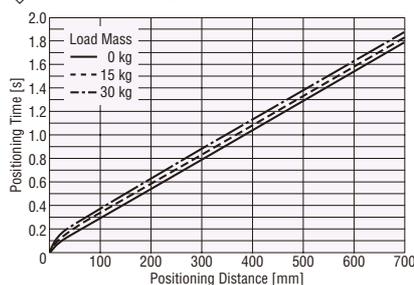


#### Positioning Time Coefficient

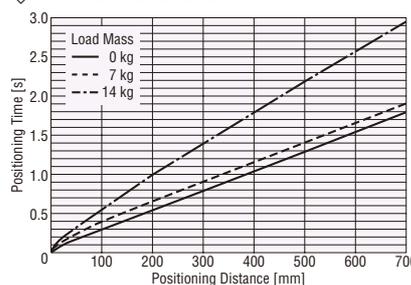
Stroke [mm]	Load Mass					
	Horizontal Installation			Vertical Installation		
	0 kg	7.5 kg	15 kg	0 kg	3.5 kg	7 kg
50~500	1.0	1.0	1.0	1.0	1.0	1.0
550	1.2	1.1	1.1	1.2	1.0	1.0
600	1.4	1.3	1.2	1.4	1.1	1.0
650	1.7	1.5	1.4	1.7	1.3	1.0
700	1.9	1.8	1.6	1.9	1.5	1.0

#### ● EZS4E (Lead: 6 mm)

##### ◇ Horizontal Installation



##### ◇ Vertical Installation



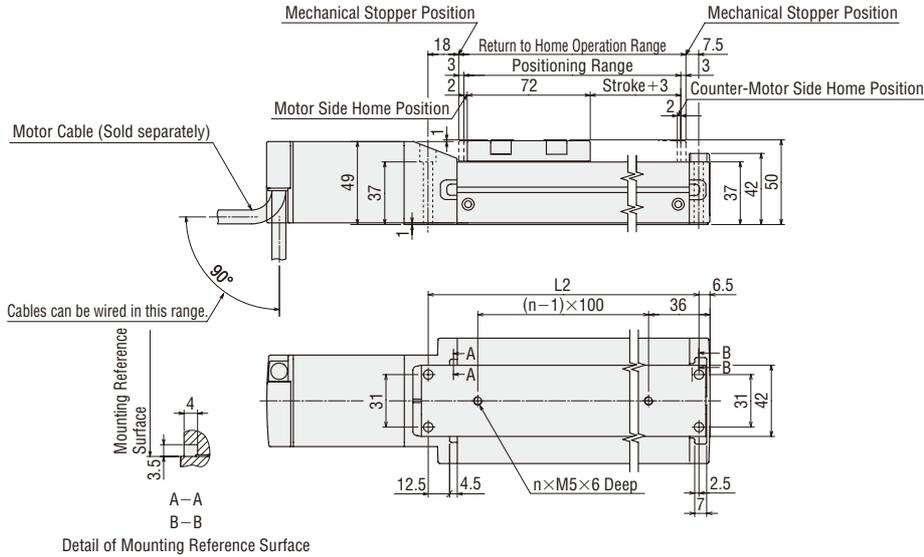
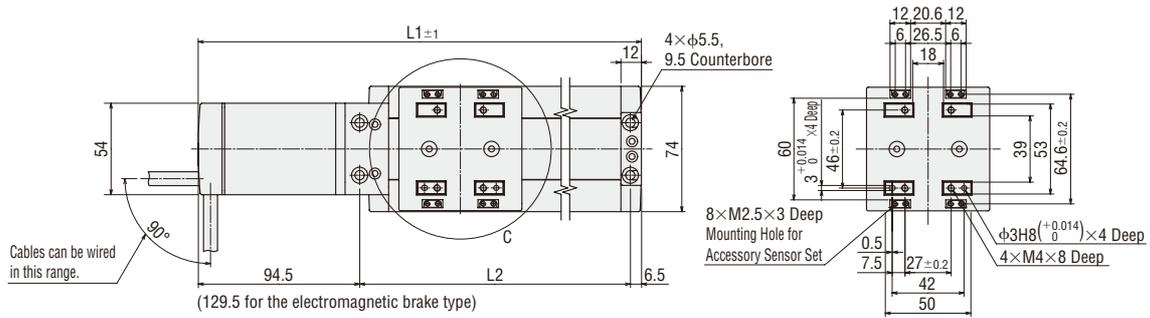
#### Positioning Time Coefficient

Stroke [mm]	Load Mass					
	Horizontal Installation			Vertical Installation		
	0 kg	15 kg	30 kg	0 kg	7 kg	14 kg
50~500	1.0	1.0	1.0	1.0	1.0	1.0
550	1.2	1.2	1.2	1.2	1.2	1.0
600	1.5	1.4	1.4	1.5	1.4	1.0
650	1.8	1.7	1.7	1.8	1.7	1.1
700	2.0	1.9	1.9	2.0	1.9	1.2

#### Notes:

- The positioning time in the graph does not include the settling time. Use a settling time of 0.15 s as a reference.
- The starting speed should be 6 mm/s or less.

## Dimensions of Linear Slide (Unit = mm)



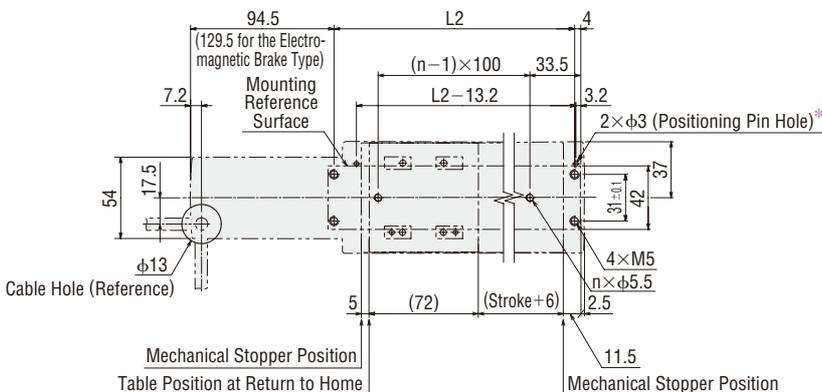
Number of Holes (n)

Stroke [mm]	n
50, 100	2
150, 200	3
250, 300	4
350, 400	5
450, 500	6
550, 600	7
650, 700	8

Linear Slide Model: EZSM4D□C, EZSM4E□C (Without Electromagnetic Brake)  
EZSM4D□MC, EZSM4E□MC (With Electromagnetic Brake)

	Electromagnetic Brake	Numbers Specifiable in the Box (□) within the Linear Slide Model Name														
		005	010	015	020	025	030	035	040	045	050	055	060	065	070	
Stroke	Not Equipped/Equipped	50	100	150	200	250	300	350	400	450	500	550	600	650	700	
L1	Not Equipped	259.5	309.5	359.5	409.5	459.5	509.5	559.5	609.5	659.5	709.5	759.5	809.5	859.5	909.5	
	Equipped	294.5	344.5	394.5	444.5	494.5	544.5	594.5	644.5	694.5	744.5	794.5	844.5	894.5	944.5	
L2	Not Equipped/Equipped	158.5	208.5	258.5	308.5	358.5	408.5	458.5	508.5	558.5	608.5	658.5	708.5	758.5	808.5	
	Not Equipped	1.8	2.1	2.3	2.5	2.7	3.0	3.2	3.4	3.7	3.9	4.1	4.3	4.6	4.8	
Mass [kg]	Equipped	2.0	2.3	2.5	2.7	2.9	3.2	3.4	3.6	3.9	4.1	4.3	4.5	4.8	5.0	

## Dimensions for Linear Slide Installation (Unit = mm)



\* The mounting reference surface can be set on either side.  
The above figure assumes that the linear slide is mounted on its top surface.

# Adopting $\alpha$ STEP Motor, Rolled Ball Screw Specification EZS6: 74 mm (W) × 66.5 mm (H), 24 VDC



Maximum Transportable Mass: Horizontal 60 kg/Vertical 30 kg  
Stroke: 50 to 850 mm (in 50 mm increments)

## Specifications of Linear Slide (RoHS)



Drive Method	Rolled Ball Screw	Repetitive Positioning Accuracy [mm]	±0.02	Resolution [mm]	0.01	Traveling Parallelism [mm]	0.03*	Maximum Load Moment [N·m]	M <sub>r</sub> : 45.7 M <sub>v</sub> : 37.5 M <sub>a</sub> : 55.6	
Model	Lead [mm]	Transportable Mass [kg]		Maximum Speed (Stroke) [mm/s]					Thrust [N]	Electromagnetic Brake Holding Force [N]
		Horizontal	Vertical	50~650 mm	700 mm	750 mm	800 mm	850 mm		
EZS6D□-K	12	~30	-	600	550	470	420	360	~184	-
EZS6D□M-K			~15							184
EZS6E□-K	6	~60	-	300	260	230	200	180	~369	-
EZS6E□M-K			~30							369

- Enter the stroke length in the box (□) within the model name.
- \* This applies when the linear slide is installed from the base surface.

## Product Number Code

# EZS 6 D 050 M - K

- ① ② ③ ④ ⑤ ⑥

①	Series <b>EZS</b> : <b>EZSII</b> Series
②	Linear Slide Size <b>6</b> : Width: 74 mm Height: 66.5 mm
③	Lead <b>D</b> : 12 mm <b>E</b> : 6 mm
④	Stroke <b>005</b> (50 mm) ~ <b>085</b> (850 mm)
⑤	Electromagnetic Brake None: Without Electromagnetic Brake <b>M</b> : With Electromagnetic Brake
⑥	Power Supply Input <b>K</b> : 24 VDC

## Linear Slide/Controller Combinations

Model names for linear slide and controller combinations are shown below.

Electromagnetic Brake	Model	Linear Slide Model	Controller Model
Not equipped	EZS6D□-K	EZSM6D□K	ESMC-K2
	EZS6E□-K	EZSM6E□K	
Equipped	EZS6D□M-K	EZSM6D□MK	
	EZS6E□M-K	EZSM6E□MK	

- Enter the stroke length in the box (□) within the model name.

## Positioning Distance – Positioning Time

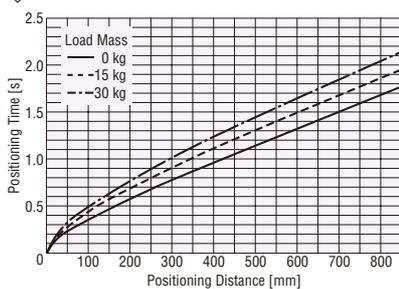
Check the (approximate) positioning time from the positioning distance.

As a rough guideline, the positioning time by the linear slide corresponds to the positioning time calculated from the graph, multiplied by the positioning time coefficient corresponding to the applicable stroke.

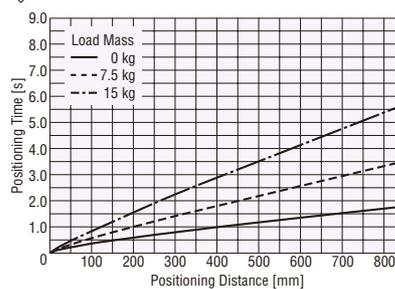
See page 12 for operation speed and acceleration.

### ● EZS6D (Lead: 12 mm)

#### ◇ Horizontal Installation



#### ◇ Vertical Installation

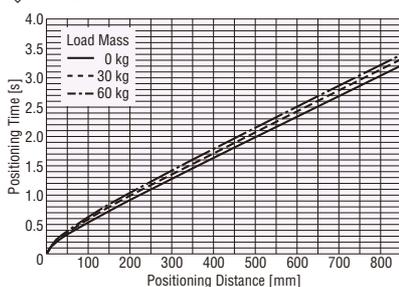


### Positioning Time Coefficient

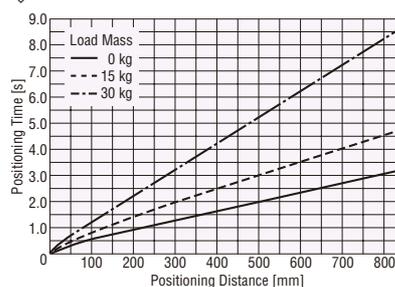
Stroke [mm]	Load Mass					
	Horizontal Installation			Vertical Installation		
	0 kg	15 kg	30 kg	0 kg	7.5 kg	15 kg
50~650	1.0	1.0	1.0	1.0	1.0	1.0
700	1.0	1.0	1.0	1.0	1.0	1.0
750	1.1	1.1	1.0	1.1	1.0	1.0
800	1.2	1.1	1.1	1.2	1.0	1.0
850	1.4	1.3	1.2	1.4	1.0	1.0

### ● EZS6E (Lead: 6 mm)

#### ◇ Horizontal Installation



#### ◇ Vertical Installation



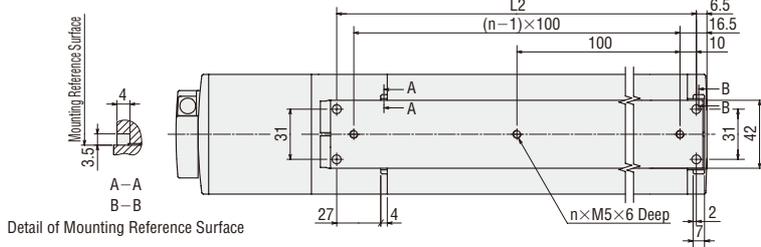
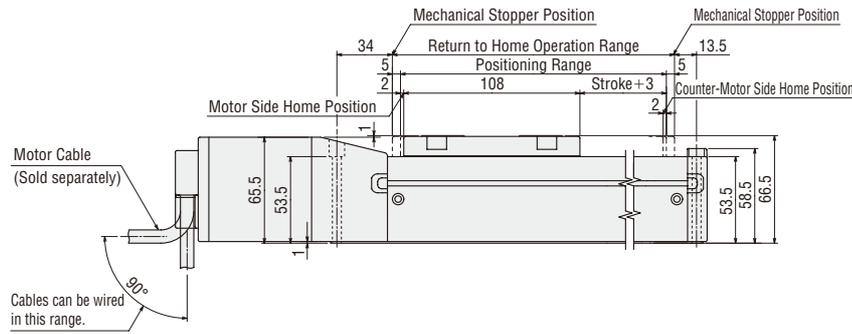
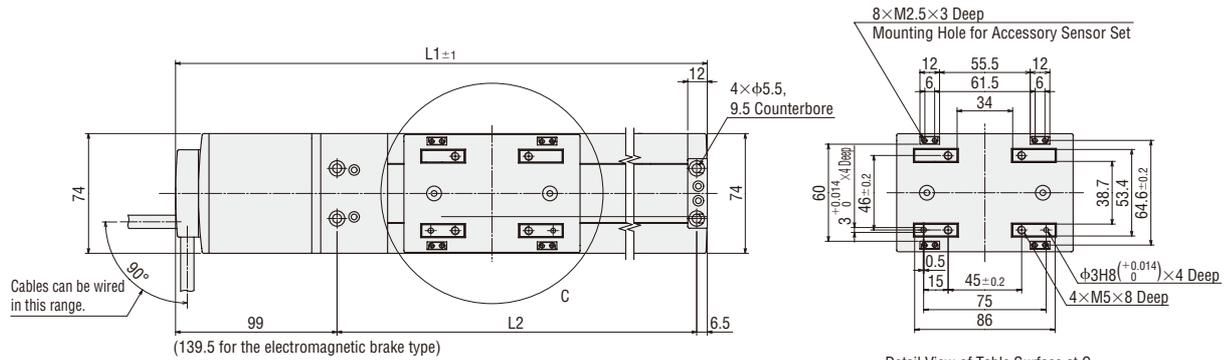
### Positioning Time Coefficient

Stroke [mm]	Load Mass					
	Horizontal Installation			Vertical Installation		
	0 kg	30 kg	60 kg	0 kg	15 kg	30 kg
50~650	1.0	1.0	1.0	1.0	1.0	1.0
700	1.1	1.0	1.0	1.1	1.0	1.0
750	1.2	1.2	1.1	1.2	1.0	1.0
800	1.3	1.3	1.3	1.4	1.0	1.0
850	1.5	1.5	1.4	1.5	1.0	1.0

### Notes:

- The positioning time in the graph does not include the settling time. Use a settling time of 0.15 s as a reference.
- The starting speed should be 6 mm/s or less.

## Dimensions of Linear Slide (Unit = mm)



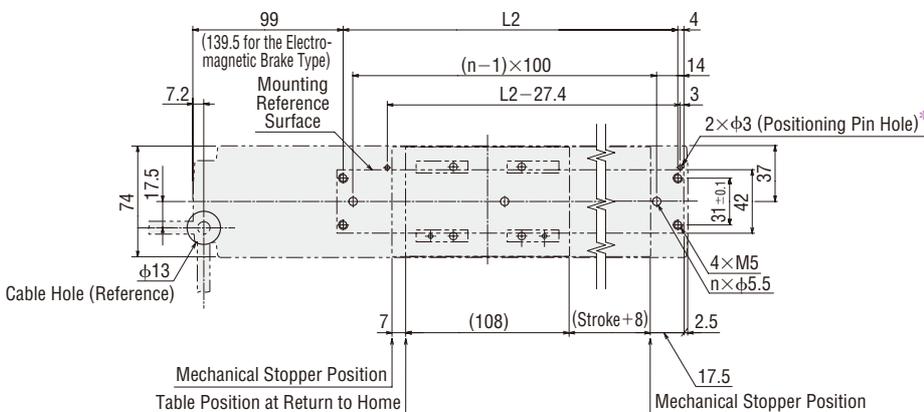
Number of Holes (n)

Stroke [mm]	n
50, 100	3
150, 200	4
250, 300	5
350, 400	6
450, 500	7
550, 600	8
650, 700	9
750, 800	10
850	11

Linear Slide Model: EZSM6D□K, EZSM6E□K (Without Electromagnetic Brake)  
EZSM6D□MK, EZSM6E□MK (With Electromagnetic Brake)

	Electromagnetic Brake	Numbers Specifiable in the Box (□) within the Linear Slide Model Name																
		005	010	015	020	025	030	035	040	045	050	055	060	065	070	075	080	085
Stroke	Not Equipped/Equipped	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850
L1	Not Equipped	326	376	426	476	526	576	626	676	726	776	826	876	926	976	1026	1076	1126
	Equipped	366.5	416.5	466.5	516.5	566.5	616.5	666.5	716.5	766.5	816.5	866.5	916.5	966.5	1016.5	1066.5	1116.5	1166.5
L2	Not Equipped/Equipped	220.5	270.5	320.5	370.5	420.5	470.5	520.5	570.5	620.5	670.5	720.5	770.5	820.5	870.5	920.5	970.5	1020.5
	Not Equipped	3.4	3.6	3.9	4.1	4.4	4.7	4.9	5.2	5.4	5.7	6.0	6.2	6.5	6.7	7.0	7.3	7.5
Mass [kg]	Not Equipped	3.4	3.6	3.9	4.1	4.4	4.7	4.9	5.2	5.4	5.7	6.0	6.2	6.5	6.7	7.0	7.3	7.5
	Equipped	3.8	4.0	4.3	4.5	4.8	5.1	5.3	5.6	5.8	6.1	6.4	6.6	6.9	7.1	7.4	7.7	7.9

## Dimensions for Linear Slide Installation (Unit = mm)



\* The mounting reference surface can be set on either side.  
The above figure assumes that the linear slide is mounted on its top surface.

# Adopting $\alpha$ STEP Motor, Rolled Ball Screw Specification

## EZS6: 74 mm (W) × 66.5 mm (H), Single-Phase 200-230 VAC

Maximum Transportable Mass: Horizontal 60 kg/Vertical 30 kg  
Stroke: 50 to 850 mm (in 50 mm increments)



### Specifications of Linear Slide (RoHS)



Drive Method	Rolled Ball Screw	Repetitive Positioning Accuracy [mm]	±0.02	Resolution [mm]	0.01	Traveling Parallelism [mm]	0.03*	Maximum Load Moment [N·m]	Mf: 45.7 Mv: 37.5 Mn: 55.6			
Model	Lead [mm]	Transportable Mass [kg]		Maximum Speed (Stroke) [mm/s]							Thrust [N]	Electromagnetic Brake Holding Force [N]
		Horizontal	Vertical	50~550 mm	600 mm	650 mm	700 mm	750 mm	800 mm	850 mm		
EZS6D□-C	12	~30	—	800	640	550	470	420	360	~184	—	
EZS6D□M-C			~15								184	
EZS6E□-C	6	~60	—	400	350	300	260	230	200	~369	—	
EZS6E□M-C			~30								369	

- Enter the stroke length in the box (□) within the model name.
- For the single-phase 100-115 VAC models, please contact the nearest Oriental Motor sales office.
- \* This applies when the linear slide is installed from the base surface.

### Product Number Code

# EZS 6 D 050 M - C

① ② ③ ④ ⑤ ⑥

① Series <b>EZS: EZSII Series</b>
② Linear Slide Size <b>6</b> : Width: 74 mm Height: 66.5 mm
③ Lead <b>D</b> : 12 mm <b>E</b> : 6 mm
④ Stroke <b>005</b> (50 mm) ~ <b>085</b> (850 mm)
⑤ Electromagnetic Brake None: Without Electromagnetic Brake <b>M</b> : With Electromagnetic Brake
⑥ Power Supply Input <b>C</b> : Single-Phase 200-230 VAC

### Linear Slide/Controller Combinations

Model names for linear slide and controller combinations are shown below.

Electromagnetic Brake	Model	Linear Slide Model	Controller Model
Not equipped	<b>EZS6D□-C</b>	EZSM6D□C	ESMC-C2
	<b>EZS6E□-C</b>	EZSM6E□C	
Equipped	<b>EZS6D□M-C</b>	EZSM6D□MC	
	<b>EZS6E□M-C</b>	EZSM6E□MC	

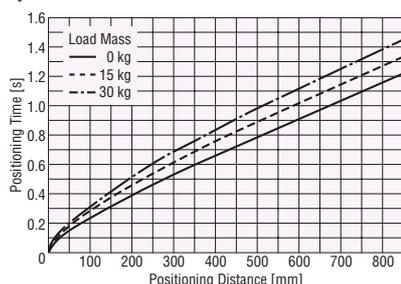
- Enter the stroke length in the box (□) within the model name.

### Positioning Distance – Positioning Time

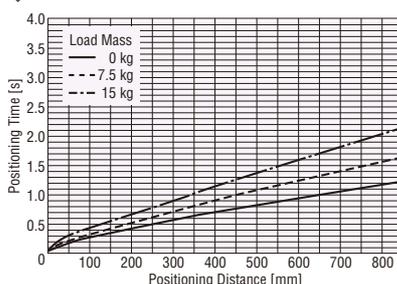
Check the (approximate) positioning time from the positioning distance.  
As a rough guideline, the positioning time by the linear slide corresponds to the positioning time calculated from the graph, multiplied by the positioning time coefficient corresponding to the applicable stroke.  
See page 13 for operation speed and acceleration.

#### ● EZS6D (Lead: 12 mm)

##### ◇ Horizontal Installation



##### ◇ Vertical Installation

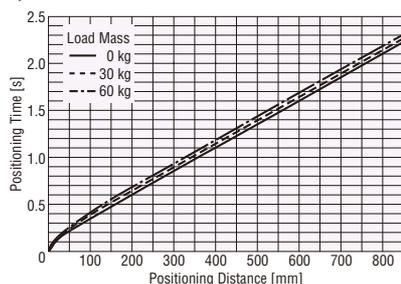


#### Positioning Time Coefficient

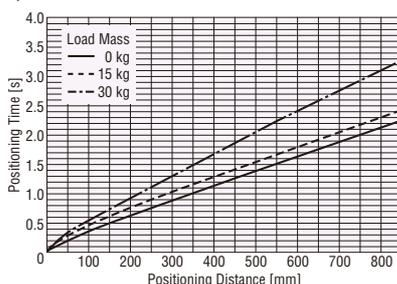
Stroke [mm]	Load Mass					
	Horizontal Installation			Vertical Installation		
	0 kg	15 kg	30 kg	0 kg	7.5 kg	15 kg
50~600	1.0	1.0	1.0	1.0	1.0	1.0
650	1.1	1.1	1.0	1.1	1.0	1.0
700	1.3	1.2	1.1	1.3	1.0	1.0
750	1.5	1.4	1.3	1.5	1.2	1.0
800	1.7	1.5	1.4	1.7	1.3	1.1
850	2.0	1.8	1.7	2.4	1.5	1.2

#### ● EZS6E (Lead: 6 mm)

##### ◇ Horizontal Installation



##### ◇ Vertical Installation



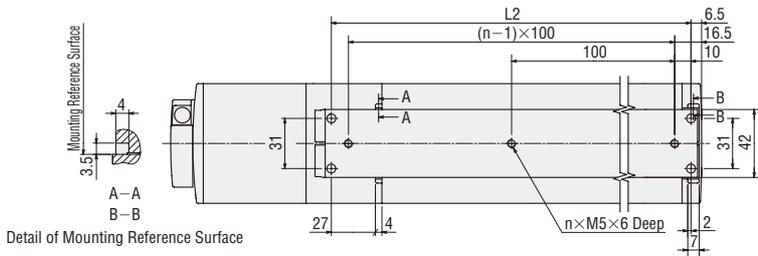
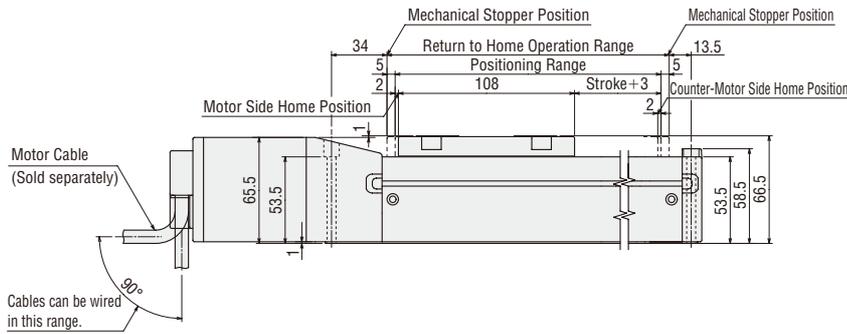
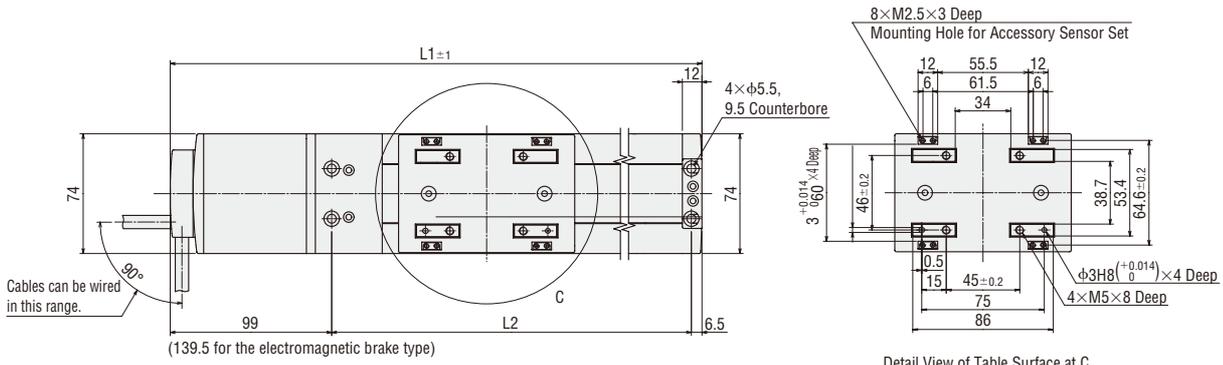
#### Positioning Time Coefficient

Stroke [mm]	Load Mass					
	Horizontal Installation			Vertical Installation		
	0 kg	30 kg	60 kg	0 kg	15 kg	30 kg
50~600	1.0	1.0	1.0	1.0	1.0	1.0
650	1.1	1.1	1.1	1.1	1.1	1.0
700	1.3	1.3	1.3	1.3	1.2	1.0
750	1.5	1.5	1.4	1.5	1.4	1.0
800	1.7	1.6	1.6	1.7	1.5	1.2
850	1.9	1.9	1.9	1.9	1.8	1.3

#### Notes:

- The positioning time in the graph does not include the settling time. Use a settling time of 0.15 s as a reference.
- The starting speed should be 6 mm/s or less.

## Dimensions of Linear Slide (Unit = mm)



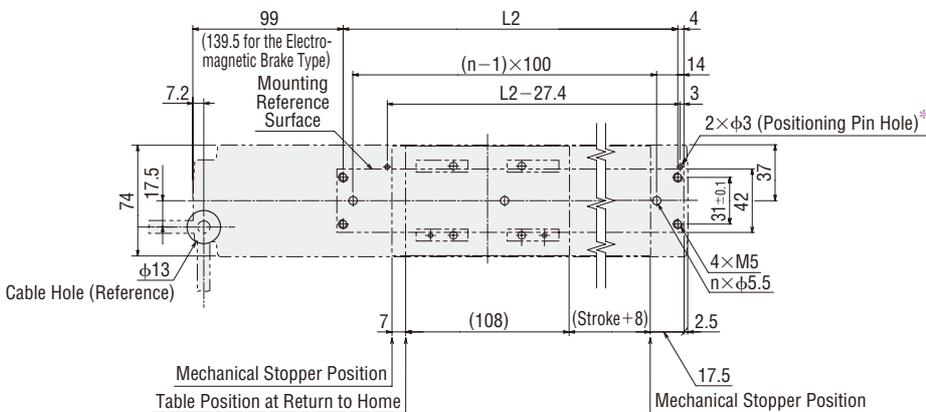
Number of Holes (n)

Stroke [mm]	n
50, 100	3
150, 200	4
250, 300	5
350, 400	6
450, 500	7
550, 600	8
650, 700	9
750, 800	10
850	11

Linear Slide Model: EZSM6D□□, EZSM6E□□ (Without Electromagnetic Brake)  
EZSM6D□□MC, EZSM6E□□MC (With Electromagnetic Brake)

	Electromagnetic Brake	Numbers Specifiable in the Box (□) within the Linear Slide Model Name																
		005	010	015	020	025	030	035	040	045	050	055	060	065	070	075	080	085
Stroke	Not Equipped/Equipped	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850
L1	Not Equipped	326	376	426	476	526	576	626	676	726	776	826	876	926	976	1076	1076	1126
	Equipped	366.5	416.5	466.5	516.5	566.5	616.5	666.5	716.5	766.5	816.5	866.5	916.5	966.5	1016.5	1066.5	1116.5	1166.5
L2	Not Equipped/Equipped	220.5	270.5	320.5	370.5	420.5	470.5	520.5	570.5	620.5	670.5	720.5	770.5	820.5	870.5	920.5	970.5	1020.5
	Not Equipped	3.4	3.6	3.9	4.1	4.4	4.7	4.9	5.2	5.4	5.7	6.0	6.2	6.5	6.7	7.0	7.3	7.5
Mass [kg]	Equipped	3.8	4.0	4.3	4.5	4.8	5.1	5.3	5.6	5.8	6.1	6.4	6.6	6.9	7.1	7.4	7.7	7.9

## Dimensions for Linear Slide Installation (Unit = mm)



\* The mounting reference surface can be set on either side.  
The above figure assumes that the linear slide is mounted on its top surface.

## Specifications of Controller

### Controller Mode

Item	Controller Model		
	ESMC-K2	ESMC-C2	
Type	Stored-data type		
Power Supply Input	Control Power	24 VDC $\pm$ 5% 1.0 A [Controller only: 0.5 A (Take into account safety margin of +0.2 A for the teaching pendant, and/or +0.3 A for the electromagnetic brake type.)]	
	Main Power	Voltage	24 VDC $\pm$ 10%
		Frequency	Single-Phase 200-230 VAC -15~+10%
		Current	50/60 Hz
Positioning Data	Setting Mode	Absolute mode (absolute-position specification), Incremental mode (relative-position specification)	
	Number	63	
	Setting Method	Data is set using the teaching pendant ( <b>EZT1</b> ) or data editing software ( <b>EZED2</b> ) (Stored in EEPROM)	
	Mode	Selective positioning Sequential positioning	
Positioning Control <sup>*2</sup>	Travel Amount Setting Range	-83886.08~+83886.07 mm (value set in units of 0.01 mm)	
	Starting Speed	0.01~200.00 mm/s (value set in units of 0.01 mm/s)	
	Operating Speed	0.01~800.00 mm/s (value set in units of 0.01 mm/s)	
	Acceleration/Deceleration	0.01~20.00 m/s <sup>2</sup> (value set in units of 0.01 m/s <sup>2</sup> )	
Control Mode	<ul style="list-style-type: none"> <li>External input mode (EXT): In this mode, operation by external signal, command position, I/O condition and alarm condition can be monitored.</li> <li>Program mode (PRG): In this mode, operation data can be created, changed or cleared.</li> <li>Parameter mode (PAR): In this mode, operation parameters and function setting parameters can be set or changed.</li> <li>Test mode (TST): In this mode, manual operation and I/O check can be performed.</li> </ul>		
Operation Mode	Positioning operation, Return to home operation, Linked operation (a maximum of 4 data), Continuous operation		
Input Signal/Input Mode	START, STOP, HOME/PRESET, FREE, MO~M5, REQ, ACL/CK 24 VDC Photocoupler input, Input resistance 4.7 k $\Omega$ FWD, RVS 5 VDC Photocoupler input, Input resistance 180 $\Omega$ or 24 VDC Photocoupler input, Input resistance 2.7 k $\Omega$ +LS, -LS, HOMELS 24 VDC Photocoupler input, Input resistance 4.7 k $\Omega$		
Output Signal/Output Mode	ALM, END/OUTR, MOVE, AREA/OUT0, OUT1 Photocoupler, Open-collector output (24 VDC, 10 mA or less) ASG1, BSG1 Photocoupler, Open-collector output (24 VDC, 15 mA or less) ASG2, BSG2 Line driver output		
Protective Function	Excessive position deviation, Overcurrent protection, Overvoltage protection, Overheat protection, Overload, Sensor error, Overspeed, Nonvolatile memory error, etc.		
Indicator (LED)	PWR, ALM	PWR, ALM, CHARGE	
Cooling Method	Natural ventilation		
Mass	0.44 kg	0.77 kg	

### Driver Mode

Item	Controller Model		
	ESMC-K2	ESMC-C2	
Power Supply Input	Control Power	24 VDC $\pm$ 5% 1.0 A [Controller only: 0.5 A (Take into account safety margin of +0.2 A for the teaching pendant, and/or +0.3 A for the electromagnetic brake type.)]	
	Main Power	Voltage	24 VDC $\pm$ 10%
		Frequency	Single-Phase 200-230 VAC -15~+10%
		Current	50/60 Hz
Maximum Response Frequency	1-pulse input mode, 2-pulse input mode: 80 kHz, Phase difference input mode: 20 kHz		
Operation Mode	Return to home operation, Pulse input operation (1-pulse input mode, 2-pulse input mode, Phase difference input mode)		
Input Signal/Input Mode	ACL/CK, FREE, C.OFF, HOME/PRESET, REQ 24 VDC Photocoupler input, Input resistance 4.7 k $\Omega$ FP, RP 5 VDC Photocoupler input, Input resistance 180 $\Omega$ or 24 VDC Photocoupler input, Input resistance 2.7 k $\Omega$ +LS, -LS, HOMELS 24 VDC Photocoupler input, Input resistance 4.7 k $\Omega$		
Output Signal/Output Mode	MOVE, END/OUTR, ALM, TIM/OUT0, OUT Photocoupler, Open-collector output (24 VDC, 10 mA or less) ASG1, BSG1 Photocoupler, Open-collector output (24 VDC, 15 mA or less) ASG2, BSG2 Line driver output		
Protective Function	Excessive position deviation, Overcurrent protection, Overvoltage protection, Overheat protection, Overload, Sensor error, Overspeed, Nonvolatile memory error, etc.		
Indicator (LED)	PWR, ALM	PWR, ALM, CHARGE	
Cooling Method	Natural ventilation		
Mass	0.44 kg	0.77 kg	

\*1 The maximum current varies depending on the connected linear slide.

[ESMC-K2] EZSM3/EZSM4: 1.7 A EZSM6: 4.0 A

[ESMC-C2] EZSM3/EZSM4: 2.1 A EZSM6: 3.0 A

\*2 Values vary depending on the connected linear slide. Check the specifications of each series.

## General Specifications of Controller

This is the value after rated operation under normal ambient temperature and humidity.

### 24 VDC

Item	Specification
Insulation Resistance	100 MΩ or more when 500 VDC megger is applied between the following places: · FG – Main power supply terminal · FG – I/O connector
Dielectric Strength	Sufficient to withstand the following for 1 minute: · FG – Main power supply terminal 0.5 kVAC 50 Hz · FG – I/O connector 0.5 kVAC 50 Hz
Ambient Temperature	0 ~ +40°C (non-freezing)
Ambient Humidity	85% or less (non-condensing)

#### Note:

- Do not measure insulation resistance or perform the dielectric strength test while the linear slide and controller are connected.

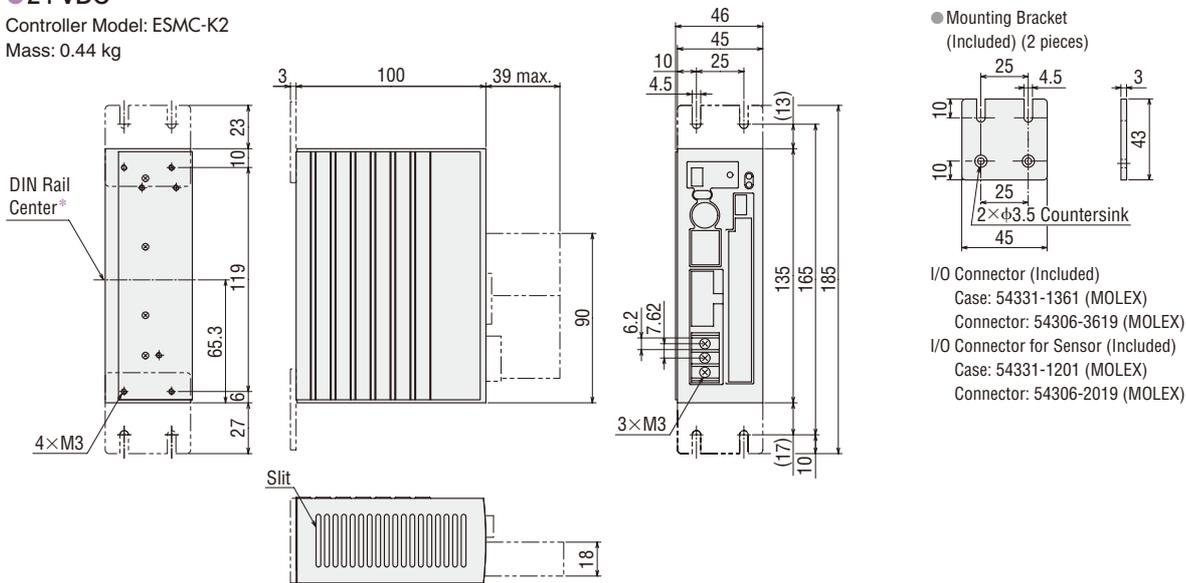
### Single-Phase 200-230 VAC

Item	Specification
Insulation Resistance	100 MΩ or more when 500 VDC megger is applied between the following places: · I/O connector – Main power supply terminal, Motor connector, Battery connector · Control power supply – Main power supply terminal, Motor connector, Battery connector · PE – Main power supply terminal, Motor connector, Battery connector
Dielectric Strength	Sufficient to withstand the following terminals for 1 minute: · Signal I/O, Control power supply – Main power supply 1.8 kV · Signal I/O, Control power supply – Motor output 1.8 kV · Signal I/O, Control power supply – Battery input 1.8 kV · PE – Main power supply 1.5 kV · PE – Motor output 1.5 kV · PE – Battery input 1.5 kV
Ambient Temperature	0 ~ +40°C (non-freezing)
Ambient Humidity	85% or less (non-condensing)

## Controller Dimensions (Unit = mm)

### 24 VDC

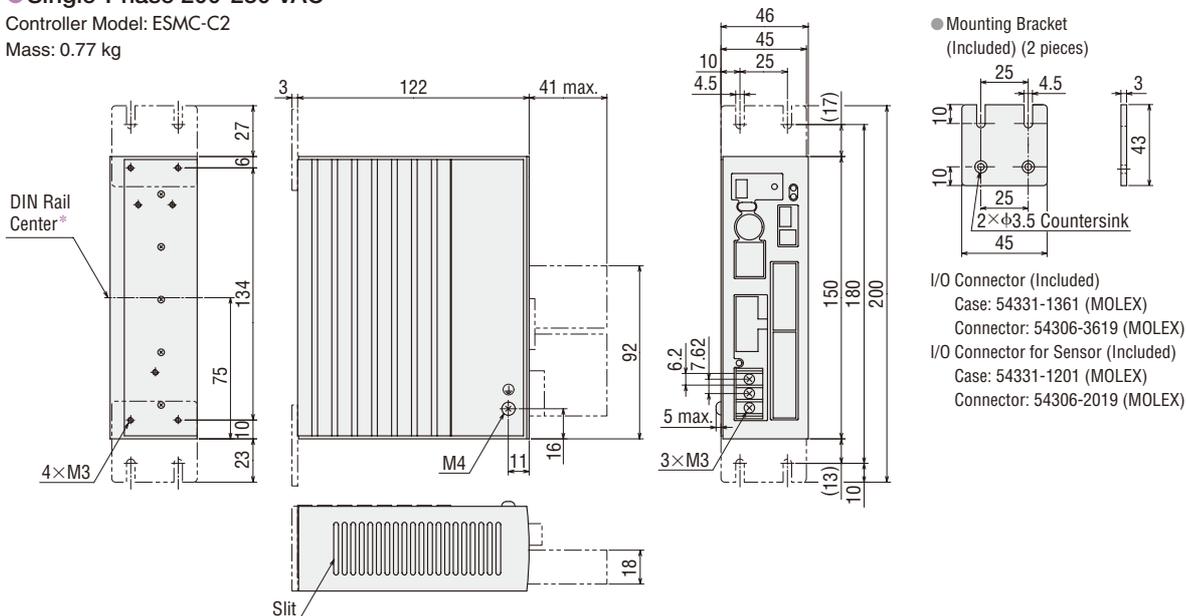
Controller Model: ESMC-K2  
 Mass: 0.44 kg



\*The center of the DIN rail when a DIN rail mounting plate (**PADPO1**, sold separately) is used for installation.

### Single-Phase 200-230 VAC

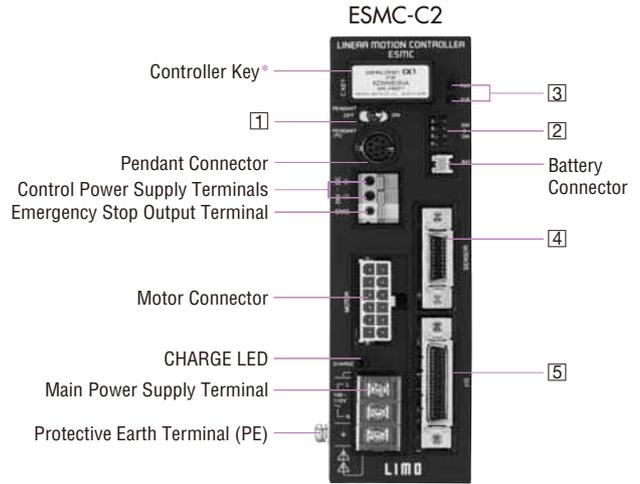
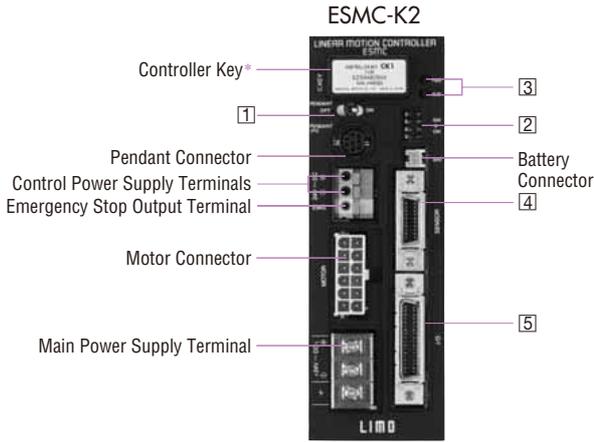
Controller Model: ESMC-C2  
 Mass: 0.77 kg



\*The center of the DIN rail when a DIN rail mounting plate (**PADPO1**, sold separately) is used for installation.

## ■ Connection and Operation

### ● Names and Functions of Controller Parts



#### ① Pendant Switch

Indication	Function
PENDANT	Enable/disable the teaching pendant. ON: Enable the teaching pendant OFF: Disable the teaching pendant (The emergency stop button on the teaching pendant is also disabled.)

#### ② Mode Switch

Indication	Function
4	Invalid (not used)
3	Switch ABS/INC ON: Absolute type OFF: Incremental type
2	Set pulse input mode (in driver mode) ON: 1-pulse input mode OFF: 2-pulse input mode
1	Switch modes ON: Driver mode OFF: Controller mode

#### ③ LED Indicator

Indication	Color	Name
PWR	Green	Control power supply indicator
ALM	Red	Alarm indicator

#### ④ Sensor I/O Connector

Indication	Input	Pin No.	Terminal Name	Function
SENSOR	Input	1	IN-COM2	Power supply for sensor
		11		
		19		
		13	+LS	+ coordinate limit sensor
		14	-LS	- coordinate limit sensor
		15	HOMELS	Mechanical home sensor

\* Make sure the linear slide model name on the controller key matches the model name of the connected linear slide. If the names do not match, the linear slide cannot be operated as specified.

## 5 I/O Connector

### ● Controller Mode

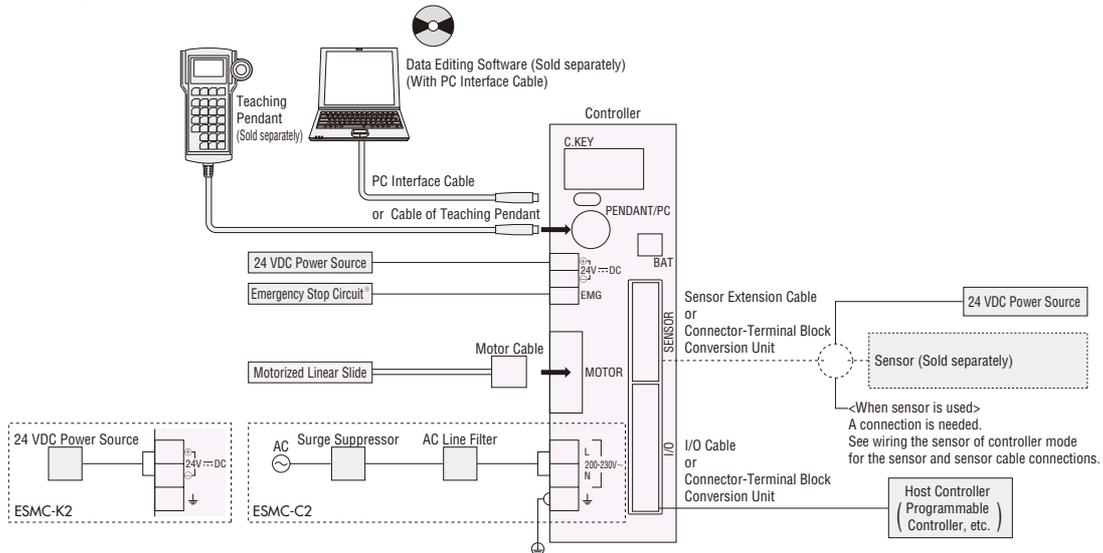
Indication	I/O	Pin No.	Terminal Name	Function	
I/O	Input	18	IN – COM1	Power supply for input signals	
		19	GND	Power supply for I/O signals	
		1	OUT – COM	Power supply for output signals	
	Output	2	ALM	This signal is output when a protective function has been activated.	
		3	MOVE	This signal is output while the linear slide is operating.	
		4	END/ OUTR	END: This signal is output when a positioning operation or return to home operation has been completed. OUTR: Output the current position	
		5	AREA/ OUTO	AREA: This output notifies that the moving part of the linear slide is staying inside a specified area. OUTO: Output the current position	
		6	T-UP/ OUT1	T-UP: This signal is output when a push-motion operation has been completed. OUT1: Output the current position	
		20	ASG1	A-phase pulse output (Open-collector)	
		21	BSG1	B-phase pulse output (Open-collector)	
		22	ASG2	A-phase pulse output (Line driver)	
		23	ASG2		
		24	BSG2	B-phase pulse output (Line driver)	
		25	BSG2		
		Input	7	START	Start the positioning operation
			8	ACL/CK	ACL: Cancel the protective function currently active CK: Output the current position
			9	FREE	Stop motor excitation and release the electromagnetic brake
			10	STOP	Stop a positioning operation, return to home operation and continuous operation
	11		M0	Select the positioning operation No.	
	12		M1		
	13		M2		
	14		M3		
	15		M4		
	16		M5		
	17		HOME/ PRESET	HOME: Start return to home operation PRESET: Preset the current position	
	30		REQ	Request the current position output	
	31		FWD+	FWD: Move the linear slide table in the + coordinate direction	
	32		FWD–		
	33		P24 – FWD		
	34		RVS+	RVS: Move the linear slide table in the – coordinate direction	
	35		RVS–		
	36		P24 – RVS		

### ● Driver Mode

Indication	I/O	Pin No.	Terminal Name	Function	
I/O	Input	18	IN – COM1	Power supply for input signals	
		19	GND	Power supply for I/O signals	
		1	OUT – COM	Power supply for output signals	
	Output	2	ALM	This signal is output when a protective function has been activated.	
		3	MOVE	This signal is output while the linear slide is operating.	
		4	END/ OUTR	END: This signal is output when a positioning operation or return to home operation has been completed. OUTR: Output the current position	
		5	TIM/ OUTO	This signal is output when the excitation sequence is at step "0." OUTO: Output the current position	
		6	OUT1	OUT1: Output the current position	
		20	ASG1	A-phase pulse output (Open-collector)	
		21	BSG1	B-phase pulse output (Open-collector)	
		22	ASG2	A-phase pulse output (Line driver)	
		23	ASG2		
		24	BSG2	B-phase pulse output (Line driver)	
		25	BSG2		
		Input	8	ACL/CK	ACL: Cancel the protective function currently active CK: Output the current position
			9	FREE	Stop motor excitation and release the electromagnetic brake
			10	C.OFF	Cut off the output current to the motor
			17	HOME/ PRESET*	HOME: Start return to home operation PRESET: Preset the current position
	30		REQ	Request the current position output	
	31		FP+	FP: Operation command pulse input (The operation command pulse input in the + coordinate direction in the 2-pulse input mode)	
	32		FP–		
	33		P24 – FP		
	34		RP+	RP: Direction of movement input (The operation command pulse input in the – coordinate direction in the 2-pulse input mode)	
	35		RP–		
	36		P24 – RP		

\* Teaching pendant (**EZT1**) or data editing software (**EZED2**) is required when switching the HOME/PRESET input of the driver mode or changing parameters.

## ● Connection Diagram



\* For the circuit configuration, refer to "Emergency stop circuit" below.

## ● Emergency Stop Circuit

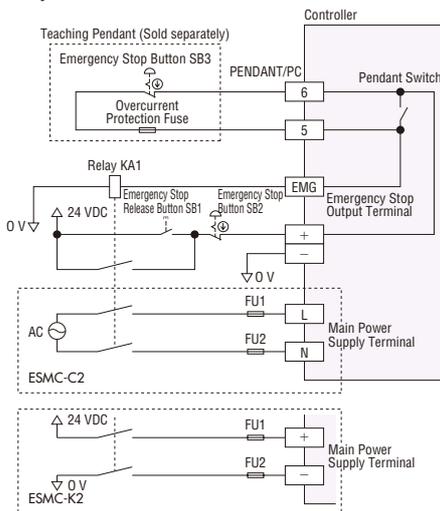
If an emergency stop function is used, provide a circuit that will cut off the main power supply and logic power supply upon pressing of the emergency stop button.

- When providing an emergency stop circuit, examine an appropriate circuit configuration based on the result of risk assessment of the equipment you are manufacturing.
- If the risk assessment result indicates that no emergency stop function is necessary, the circuit configuration shown in "Connection example when an emergency stop function is not used" can be used.
- Do not connect the emergency stop output terminal directly to GND (0 V). Doing so will blow the overcurrent protection fuse in the teaching pendant, in this case the emergency stop can no longer be canceled.
- Provide a measure on the machine side so that the machine will operate safely when the motorized actuator is stopped.

Refer to the operating manual for details.

### ◇ Connection Example When an Emergency Stop Function is Used

A connection example of controller power system and emergency stop system is given below, which conforms to Category 1 under the EN 954-1 safety standard and Stop Category 0 under the EN 60204-1 safety standard.

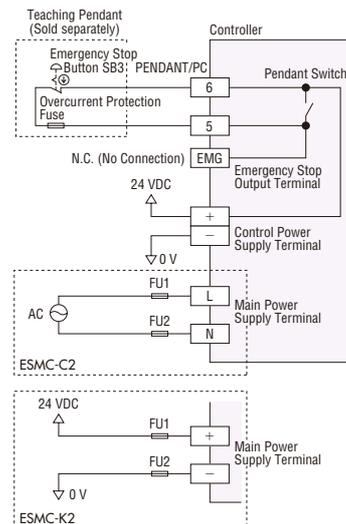


- KA1, SB2: Use an EN-certified product.
- KA1: Rating 24 VDC, 30 mA
- The Pendant switch is ON in this figure.

### ◇ Power Source

- Two types of power source, main power and control power are required. Both power sources must at least have the specified capacity.
- **Specifications of controller** → Page 30
- If the power capacity is insufficient, motor output may drop, which may cause the linear slide to malfunction (due to lack of thrust force).

### ◇ Connection Example When an Emergency Stop Function is Not Used



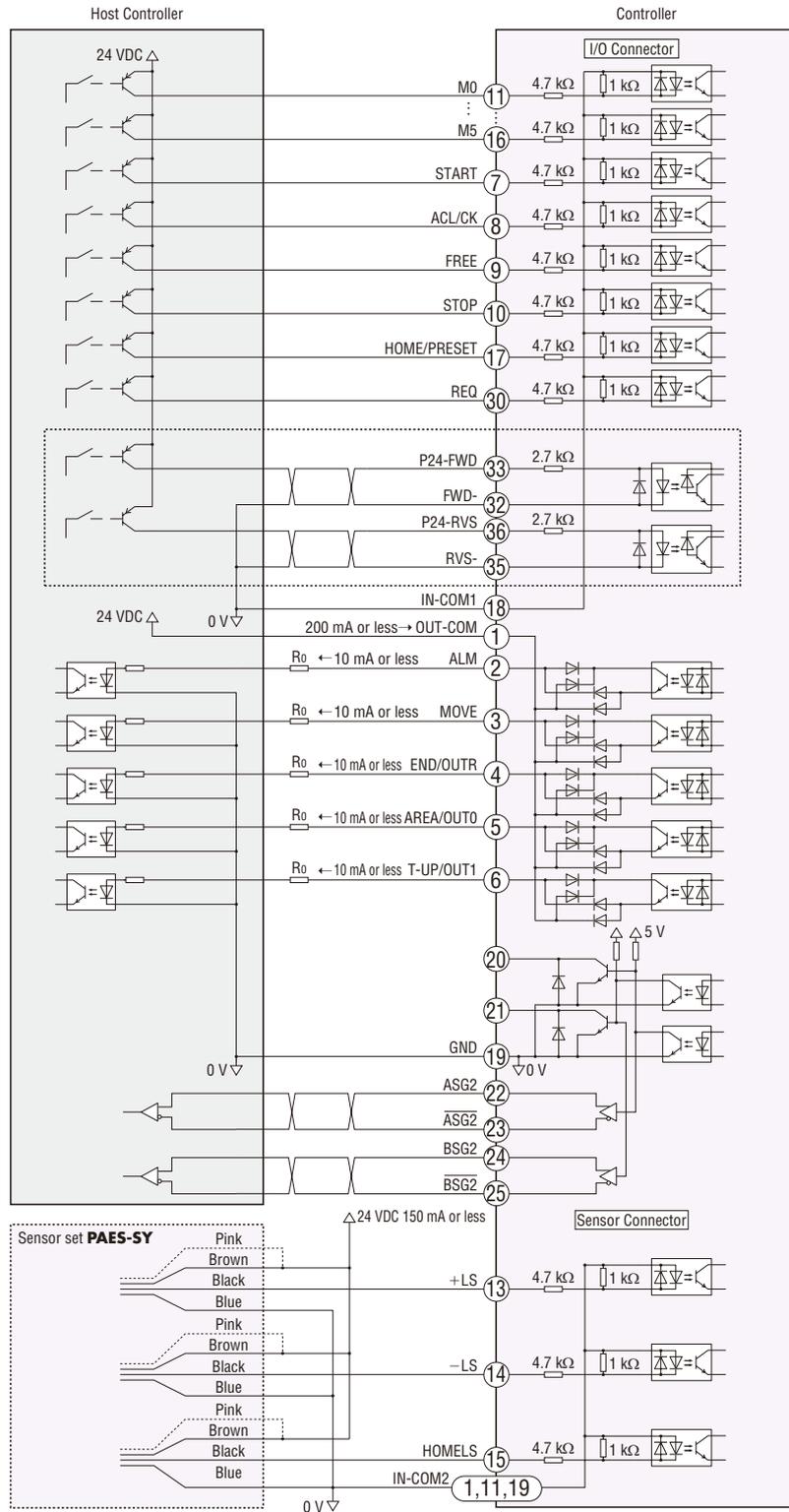
When the emergency stop button (SB3) on the teaching pendant is pressed, an emergency stop alarm (Err68) will generate and the motorized actuator will stop operating. This stopping method is based on software control. It does not meet the emergency stop requirements specified in safety standards.

### ◇ Notes on Wiring

- Wire the control I/O signal lines over as short a distance as possible, using a shield cable [AWG28 (0.08 mm<sup>2</sup>) or thicker].
- Be sure to use an accessory motor cable to wire the linear slide and controller.
- Wire the control I/O signal lines by providing a minimum distance of 30 cm from the power lines (large-current circuits such as the power supply line and motor line). Do not wire the control I/O signal lines with the power lines in the same duct or bundle them together.

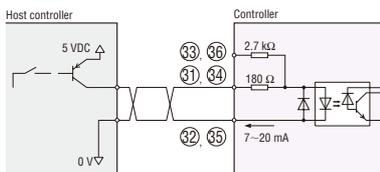
◇ Controller Mode

- Driver mode operating return to home operation with the linear motion controller

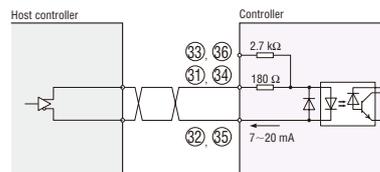


◇ FWD (FP) and RVS (RP) Signals

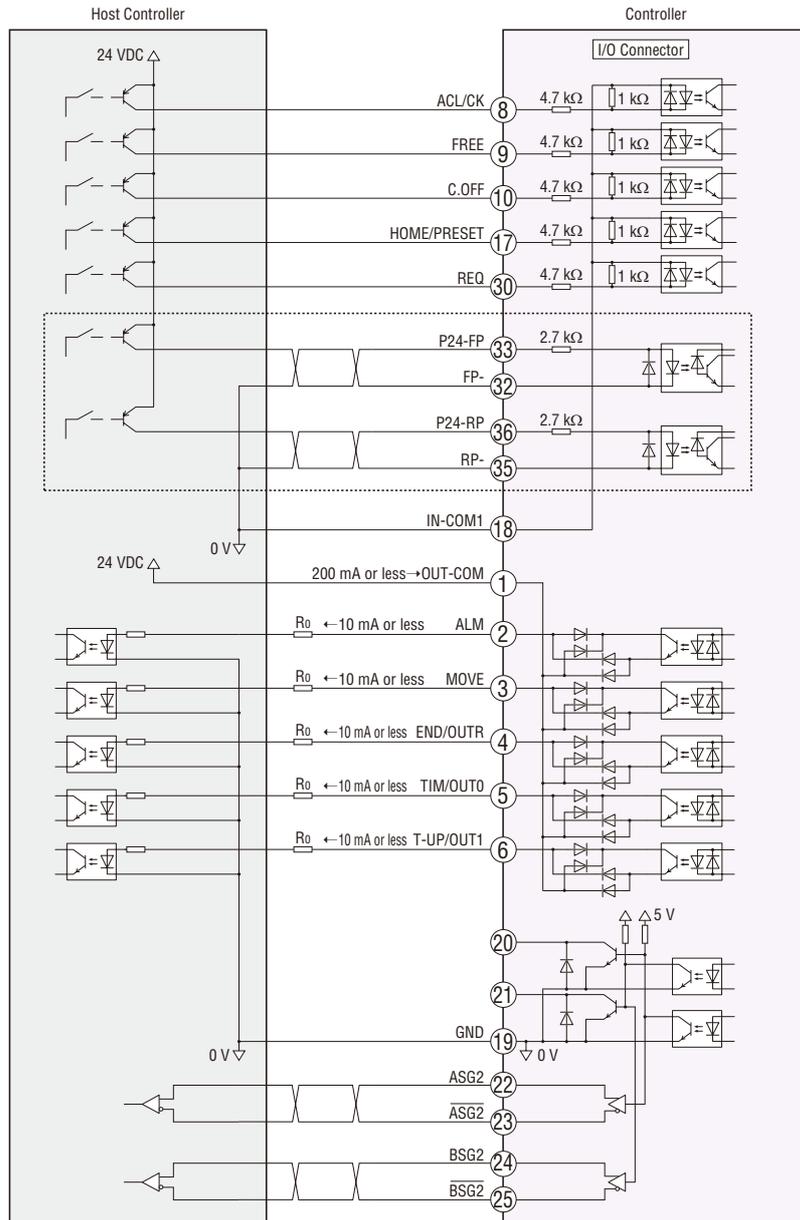
When connecting to 5 VDC



When connecting to a line driver output circuit

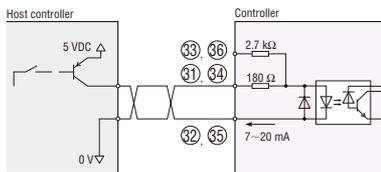


◇ Driver Mode

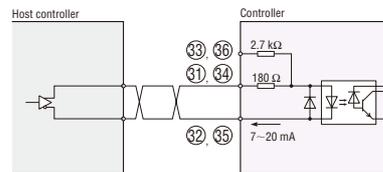


◇ FWD (FP) and RVS (RP) Signals

When connecting to 5 VDC



When connecting to a line driver output circuit



# Accessories (Sold separately)

## Motor Cables RoHS

A set of dedicated cables is used to connect the linear slide of the **EZSII** Series with the controller. Use flexible cables in applications where the cables will flex repeatedly. (For both the electromagnetic brake type and non-electromagnetic brake type.)



### Product Line

Standard Cables (Without Electromagnetic Brake/  
With Electromagnetic Brake)

Model	Length (L)
<b>CC010ES-2</b>	1 m
<b>CC020ES-2</b>	2 m
<b>CC030ES-2</b>	3 m
<b>CC050ES-2</b>	5 m
<b>CC070ES-2</b>	7 m
<b>CC100ES-2</b>	10 m
<b>CC150ES-2</b>	15 m*
<b>CC200ES-2</b>	20 m*

\* Keep the cable length to 10 m or below for 24 VDC linear slides.

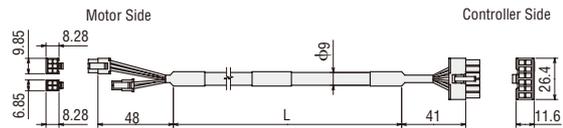
Flexible Cables (Without Electromagnetic Brake/  
With Electromagnetic Brake)

Model	Length (L)
<b>CC010ESR-2</b>	1 m
<b>CC020ESR-2</b>	2 m
<b>CC030ESR-2</b>	3 m
<b>CC050ESR-2</b>	5 m
<b>CC070ESR-2</b>	7 m
<b>CC100ESR-2</b>	10 m
<b>CC150ESR-2</b>	15 m*
<b>CC200ESR-2</b>	20 m*

\* Keep the cable length to 10 m or below for 24 VDC linear slides.

### Dimensions (Unit = mm)

#### CC□ES-2/CC□ESR-2

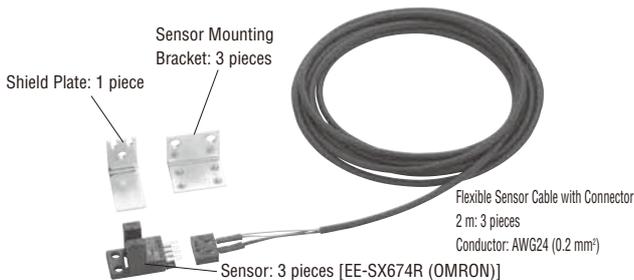


## Sensor Set RoHS

The sensor set, dedicated to the **EZSII** Series, consists of three sets of a sensor, a sensor mounting bracket and a flexible sensor cable with connector (2 m), and one shield plate. The screws needed for installation are also included.

### Product Line

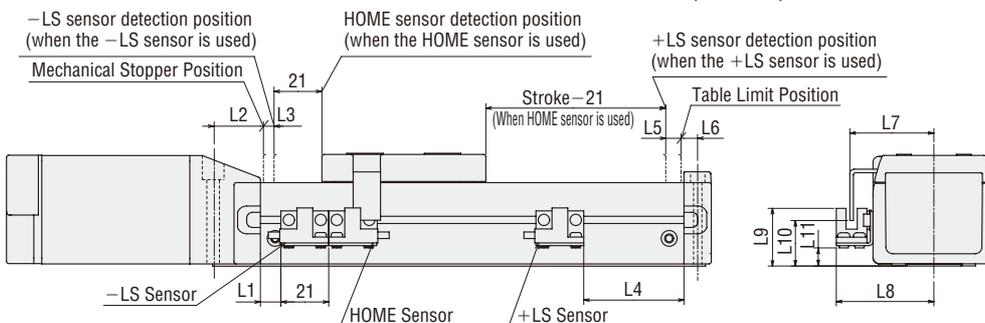
Model
<b>PAES-SY</b>



### Specifications

Item	Model: EE-SX674R (OMRON)
Power Supply	5 to 24 VDC ±10%, ripple (P-P) 10% or less
Current Consumption	30 mA or less
Control Output	PNP open-collector output, 5 to 24 VDC, 50 mA or less Residual voltage 1.3 V or less (at load current of 50 mA)
Indicator Lamp	Detection display (red)
Sensor Logic	Normal open/normal close (switchable, depending on connection)

### Dimensions of Recommended Sensor Installation Positions (Unit = mm)



Linear Slide Size	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11
<b>EZS3</b>	9	18	5	44	6	7.5	37.3	43.3	25.8	20.4	8.1
<b>EZS4</b>	9	18	5	44	6	7.5	47.3	53.3	25.8	20.4	8.1
<b>EZS6</b>	13.5	34	7	87.5	8	13.5	47.3	53.3	42.3	36.9	24.6

#### Note:

● If the stroke is 60 mm or below, all three sensors cannot be installed.

## Sensor Extension Cables (RoHS)

These cables are used for connection between the controller and the sensors.

### Product Line

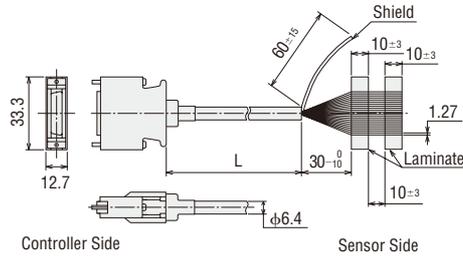
Model	Length (L)
<b>CC20D1-1</b>	1 m
<b>CC20D2-1</b>	2 m



### Dimensions (Unit = mm)

#### CC20D□-1

Conductor: AWG28 (0.08mm<sup>2</sup>)



## Connector – Terminal Block Conversion Unit (RoHS)

A conversion unit that connects a driver to a host controller using a terminal block.

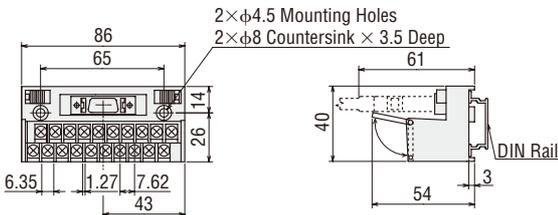
- With a signal name plate for easy, one-glance identification of driver signal names
- DIN-rail mountable
- Cable length: 1 m

### Product Line

Model	Length
<b>CC20T1</b>	1 m
<b>CC36T1</b>	1 m

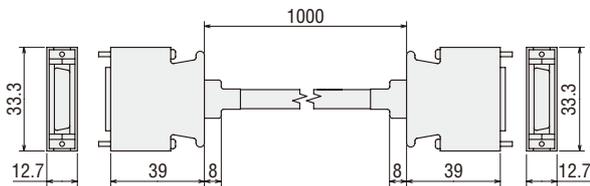
### Dimensions (Unit = mm)

#### CC20T1

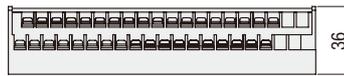
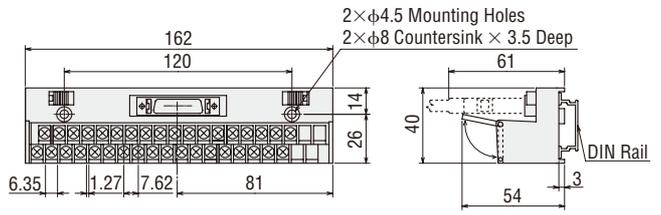


Terminal Block Pin No.

11	12	13	14	15	16	17	18	19	20
1	2	3	4	5	6	7	8	9	10

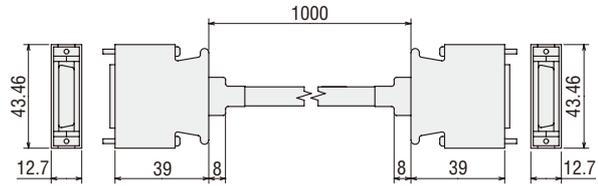


#### CC36T1



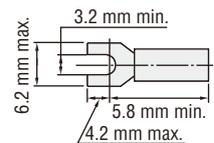
Terminal Block Pin No.

19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18



### Recommended Crimp Terminals

- Terminal screw size: M3
- Tightening torque: 1.2 N·m
- Applicable minimum lead wire: AWG22 (0.3 mm<sup>2</sup>)
- Round terminals are not available.



## Teaching Pendant This product does not conform to RoHS Directive.

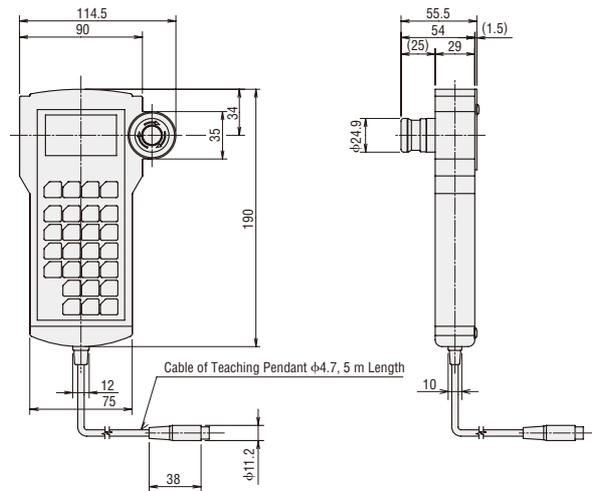
The teaching pendant allows you to set and operate various data on hand, as well as to monitor the set data, current position and I/O status in real time.

### Product Line

Model
<b>EZT1</b>



### Dimensions (Unit = mm)



### Specifications

Display	LCD with 2-colored back light
Cable Length	5 m
Mass	0.37 kg
Ambient Temperature	0~+40°C (non-freezing)

## Data Editing Software RoHS

With this software you can set and edit various data on a PC. It comes with a PC interface cable for connecting the controller and PC. The software also provides various monitoring functions.

### Product Line

Model
<b>EZED2</b>

Ver 1.11 or later



### PC Interface Cable

Cable Length	5 m
PC Connector Type	D-sub 9-Pin
Communication Port	One RS-232C communication port

### Specifications (Operating Environment)

Item	Model: <b>EZED2</b>
Operating Software	Microsoft® Windows® 2000 Professional, Service Pack 4 or later (hereinafter referred to as "Windows® 2000") Microsoft® Windows® XP Home Edition, Service Pack 2 or later (hereinafter referred to as "Windows® XP") Microsoft® Windows® XP Professional Edition, Service Pack 2 or later (hereinafter referred to as "Windows® XP") Microsoft® Windows® XP Media Center Edition 2004 Service Pack 2 or later (hereinafter referred to as "Windows® XP") Microsoft® Windows® XP Media Center Edition 2005 Service Pack 2 or later (hereinafter referred to as "Windows® XP") Microsoft® Windows® 98, Service Pack 1 or later* (hereinafter referred to as "Windows® 98") Microsoft® Windows® 98 Second Edition* (hereinafter referred to as "Windows® 98") Microsoft® Windows® Millennium Edition* (hereinafter referred to as "Windows® Me")
Memory	Windows® 2000: 128 MB or more (192 MB or more is recommended.) Windows® XP Home Edition or Professional Edition: 256 MB or more Windows® XP Media Center Edition 2004 or 2005: 320 MB or more Windows® 98: 64 MB or more (128 MB or more is recommended.) Windows® 98 Second Edition: 64 MB or more (128 MB or more is recommended.) Windows® Me: 96 MB or more (160 MB or more is recommended.)
Computer	Pentium® III 500 MHz or more (The OS must be supported.)
Display Resolution	XGA (1024×768) or higher resolution video adapter and monitor
Free Hard Disk Space	Free disk space of 60 MB or more
Serial Port	RS-232C port, 1 channel
Disk Device	CD-ROM drive

\* Microsoft® Internet Explorer 5.01 or later is also required.

● Service Pack signifies a service pack provided by Microsoft Corporation.

● Microsoft and Windows are registered trademarks of Microsoft Corporation in the United States and other countries.

● Pentium is a trademark or registered trademark of Intel Corporation or its subsidiaries in the United States and other countries.

● Data editing software operation under English OS environment has been verified.

### Teaching Pendant (EZT1)/Data Editing Software (EZED2) Function Comparison Table

Function	Item	
	Teaching Pendant (Model: <b>EZT1</b> )	Data Editing Software (Model: <b>EZED2</b> )
Cable Length	5 m	5 m <sup>*1</sup>
Display	LCD 17 characters × 4 lines	PC screen
Emergency Stop Switch	○	×
Operation Data Setting	○	○
Parameter Setting	○	○
Teaching Function (Direct/Remote)	○	○
Operation Data Monitoring	○	○
I/O Monitoring	○	○
Waveform Monitoring	×	○
Test Operation	○	○
Data Copy	×	○
Printing Function	×	○ <sup>*2</sup>

\*1 PC interface cable (included) is used.

\*2 The printing function is not available on computers running Windows® 98/Me.

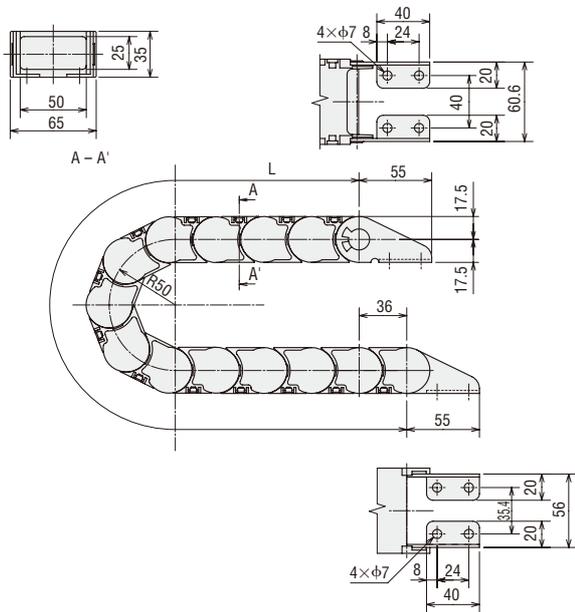
## ■ Cable Holders (RoHS)

- This cable holder protects and guides cables in dual or three-axis configurations.
- It can be easily installed on a dual axes mounting bracket using the supplied brackets.

Stroke [mm]	Applicable Cable Holder	
	Length (L) [mm]	Model
50~70	396	<b>PACH65-11</b>
80~120	468	<b>PACH65-13</b>
130~170	504	<b>PACH65-14</b>
180~220	540	<b>PACH65-15</b>
230~270	612	<b>PACH65-17</b>
280~320	648	<b>PACH65-18</b>
330~370	720	<b>PACH65-20</b>
380~420	756	<b>PACH65-21</b>
430~470	792	<b>PACH65-22</b>
480~520	864	<b>PACH65-24</b>
530~570	900	<b>PACH65-25</b>
580~620	972	<b>PACH65-27</b>
630~670	1008	<b>PACH65-28</b>
680~720	1044	<b>PACH65-29</b>
730~770	1116	<b>PACH65-31</b>
780~820	1152	<b>PACH65-32</b>
830~850	1224	<b>PACH65-34</b>



### ● Dimensions (Unit = mm)



Model	L (mm)
<b>PACH65-11</b>	396
<b>PACH65-13</b>	468
<b>PACH65-14</b>	504
<b>PACH65-15</b>	540
<b>PACH65-17</b>	612
<b>PACH65-18</b>	648
<b>PACH65-20</b>	720
<b>PACH65-21</b>	756
<b>PACH65-22</b>	792
<b>PACH65-24</b>	864
<b>PACH65-25</b>	900
<b>PACH65-27</b>	972
<b>PACH65-28</b>	1008
<b>PACH65-29</b>	1044
<b>PACH65-31</b>	1116
<b>PACH65-32</b>	1152
<b>PACH65-34</b>	1224

## I/O Cables (RoHS)

These cables are used for connection between the controller and the host controller.

A half-pitch connector allowing one-touch connection to the controller is attached at one end of the flat cable.

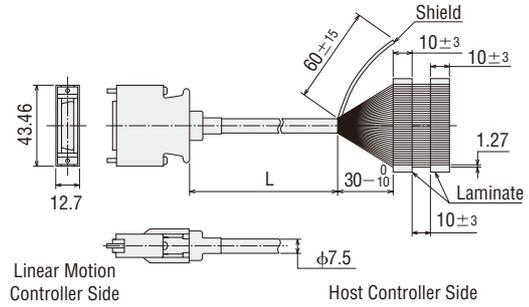


### Product Line

Model	Length (L)
<b>CC36D1-1</b>	1 m
<b>CC36D2-1</b>	2 m

### Dimensions (Unit = mm)

Conductor: AWG28 (0.08mm<sup>2</sup>)



## DIN Rail Mounting Plate (RoHS)

This mounting plate is convenient for installing the controller of the **EZ limo** on DIN rails easily.

(Mounting screws are included.)

### Product Line

Model
<b>PADP01</b>

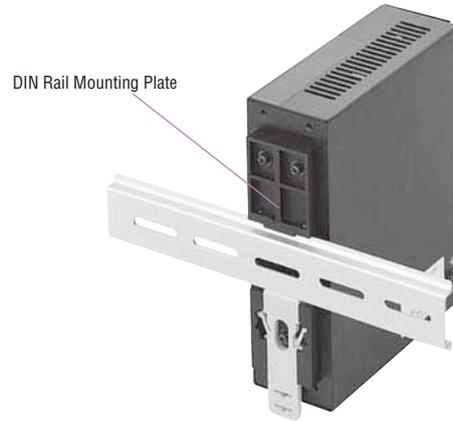
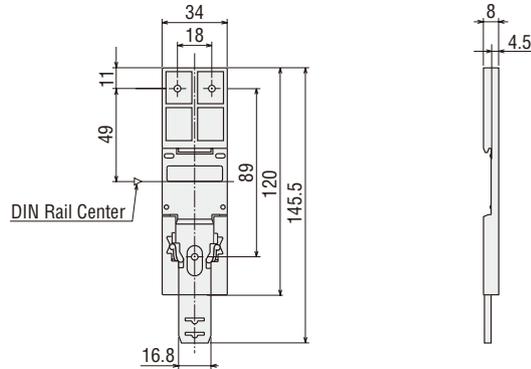
### Dimensions (Unit = mm)

**PADP01**

Mass: 20 g

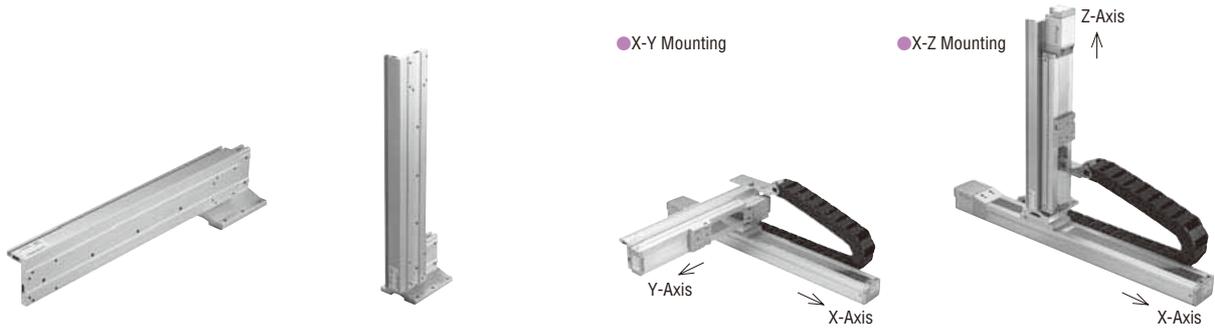
● Screws (Included)

M3 Length 8 mm ... 3 pieces



## Dual Axes Mounting Brackets (RoHS)

Mounting bracket for using two axes of **EZSII** Series motorized linear slides.



### ● Features

#### ◇ Biaxial Configuration Can be Easily Implemented in **EZSII** Series.

Using the specialized mounting bracket allows you to use two motorized linear slides in biaxial configuration. Various combinations are available such as X-Y or X-Z .

#### Available Combinations

##### X-Y Mounting

X-Axis	Y-Axis	Transportable Mass (kg)
<b>EZS4D</b>	<b>EZS3D</b>	2.3 or less
<b>EZS6D</b>	<b>EZS3D</b>	5.7 or less
<b>EZS6D</b>	<b>EZS4D</b>	12.7 or less

##### X-Z Mounting

X-Axis	Z-Axis	Transportable Mass (kg)
<b>EZS4D</b>	<b>EZS3D</b>	3.5 or less
<b>EZS6D</b>	<b>EZS3D</b>	3.5 or less
<b>EZS6D</b>	<b>EZS4D</b>	6.7 or less

- The maximum length of a linear slide for the second axis (Y and Z) is 300 mm.
- This is applicable to products with 12 mm in lead. Speed is reduced by half for products with 6 mm in lead.
- Specification values are based on those when the X-axis is mounted horizontally.

#### ◇ Simple Streamlined Wiring with Specialized Cable Holder (Cable Holder sold separately)

Specialized cable holders are available.

### ● Product Number Code

**PAB - S4 S3 R 005**

①                      ②                      ③                      ④                      ⑤

①	Dual Axes Mounting Bracket	
②	First Axis Linear Slide	<b>S4: EZS4D</b> <b>S6: EZS6D</b>
③	Second Axis Linear Slide	<b>S3: EZS3D</b> <b>S4: EZS4D</b>
④	Combination Patterns	<b>R: R-Type</b> <b>L: L-Type</b>
⑤	Stroke in Second Axis	

- First axis refers to X-axis, while second axis does Y- or Z-axis.

### ● Product Line

Combination of <b>EZS4</b> and <b>EZS3</b>		Combination of <b>EZS6</b> and <b>EZS3</b>		Combination of <b>EZS6</b> and <b>EZS4</b>	
R-Type	L-Type	R-Type	L-Type	R-Type	L-Type
<b>PAB-S4S3R005</b>	<b>PAB-S4S3L005</b>	<b>PAB-S6S3R005</b>	<b>PAB-S6S3L005</b>	<b>PAB-S6S4R005</b>	<b>PAB-S6S4L005</b>
<b>PAB-S4S3R010</b>	<b>PAB-S4S3L010</b>	<b>PAB-S6S3R010</b>	<b>PAB-S6S3L010</b>	<b>PAB-S6S4R010</b>	<b>PAB-S6S4L010</b>
<b>PAB-S4S3R015</b>	<b>PAB-S4S3L015</b>	<b>PAB-S6S3R015</b>	<b>PAB-S6S3L015</b>	<b>PAB-S6S4R015</b>	<b>PAB-S6S4L015</b>
<b>PAB-S4S3R020</b>	<b>PAB-S4S3L020</b>	<b>PAB-S6S3R020</b>	<b>PAB-S6S3L020</b>	<b>PAB-S6S4R020</b>	<b>PAB-S6S4L020</b>
<b>PAB-S4S3R025</b>	<b>PAB-S4S3L025</b>	<b>PAB-S6S3R025</b>	<b>PAB-S6S3L025</b>	<b>PAB-S6S4R025</b>	<b>PAB-S6S4L025</b>
<b>PAB-S4S3R030</b>	<b>PAB-S4S3L030</b>	<b>PAB-S6S3R030</b>	<b>PAB-S6S3L030</b>	<b>PAB-S6S4R030</b>	<b>PAB-S6S4L030</b>

## ■ Combination Patterns

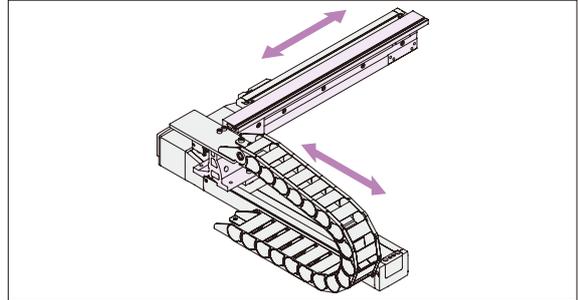
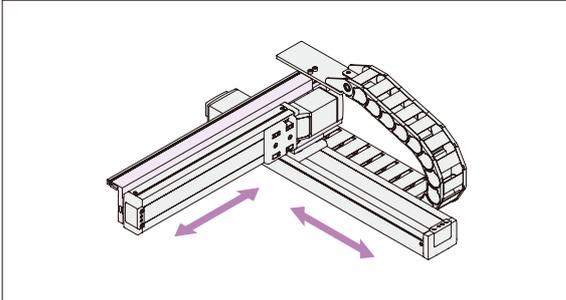
### ● R-Type

**PAB-S4S3R** □

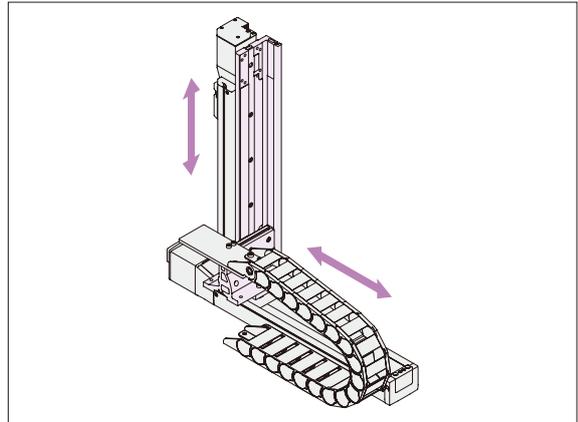
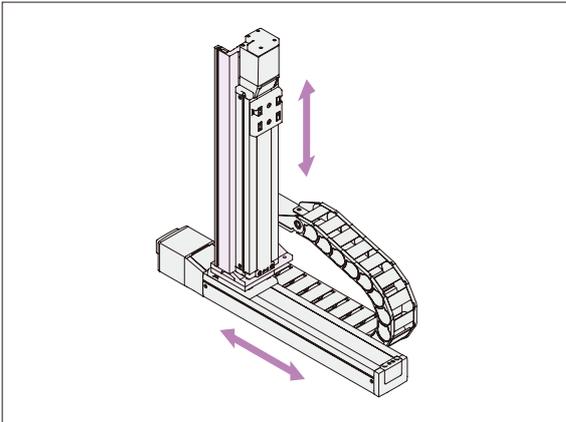
**PAB-S6S3R** □

**PAB-S6S4R** □

#### ◇ X-Y



#### ◇ X-Z



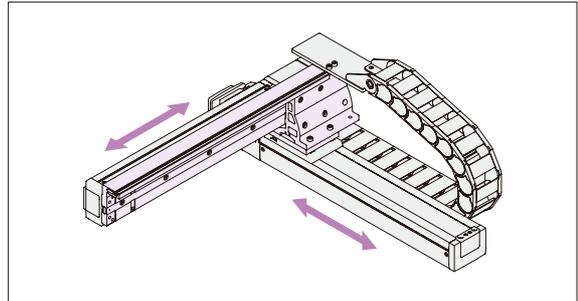
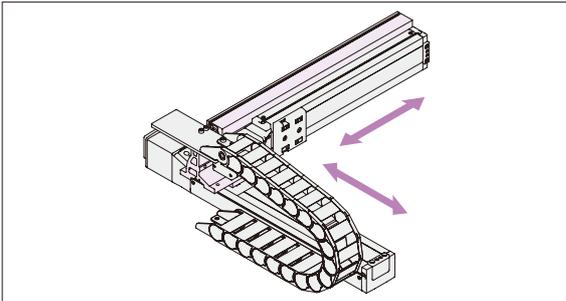
### ● L-Type

**PAB-S4S3L** □

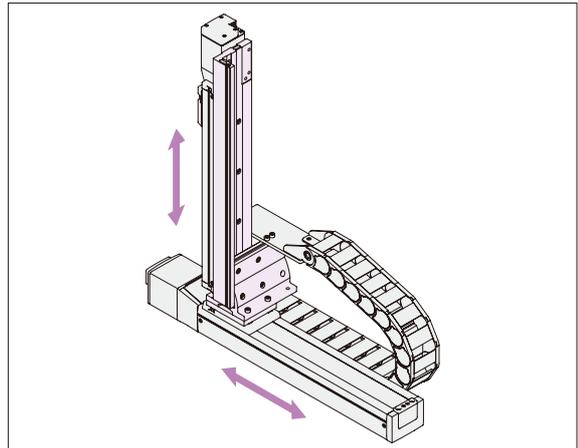
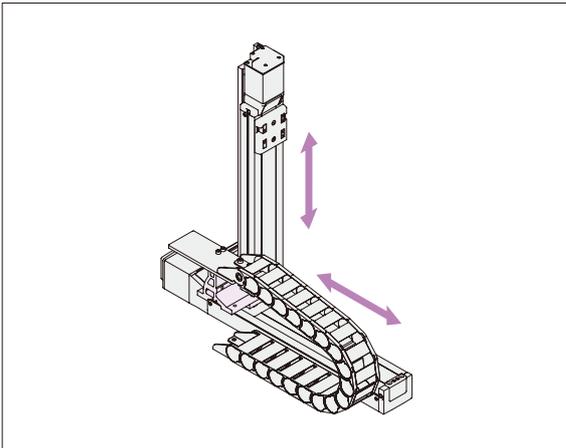
**PAB-S6S3L** □

**PAB-S6S4L** □

#### ◇ X-Y



#### ◇ X-Z



This product is manufactured at a plant certified with the international standards **ISO 9001** (for quality assurance) and **ISO 14001** (for systems of environmental management).

# Orientalmotor

Specifications are subject to change without notice.  
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