

**RoHS** RoHS Directive-Compliant

**Motorized Linear Slides**

# EZ limo EZSII Series for Clean Room Use

● Connection Information ●  
 Technical reference → Page G-1  
 Safety standards → Page H-4

The **EZSII** Series for Clean Room Use is a product designed with the same level of function and performance as the **EZSII** Series but is ideal for clean room environment.

● List of products conforming to safety standards (product name, applicable standards, file number, certification body) → Page H-12



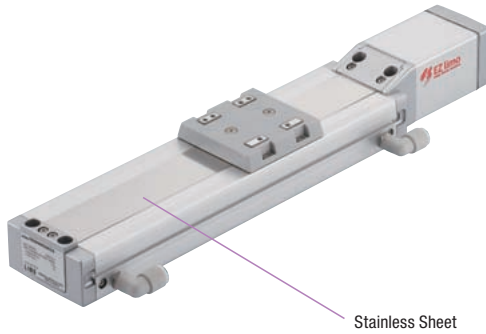
## Features

### ● ISO Standard Class 3 Clean Room Level

This product has achieved the ISO Standard Class 3 rating (equivalent to FED Standard Class 1) through reduced dust-generative properties using grease and improved airtight properties using a stainless sheet.

● Reference

ISO Standard Class 3: 1000 particles or less of 0.1 μm particles or more per 1 m<sup>3</sup> of air.  
 FED Standard Class 1: Only 1 particle of 0.5 μm particles or more per 1 cf (=1 cubic feet) of air.



### ● Linear Slides with Air Couplers for Suction on Either the Left or Right

Air couplers for suction prevent dust from forming on the outside of the linear slide by sucking out dust generated internally. Left and right joints offer easy installation for your products.

#### Air Couplers for Suction Directions

##### 1 (Right)



##### 2 (Left)



### ● Utilizes Low Dust-Generative Grease

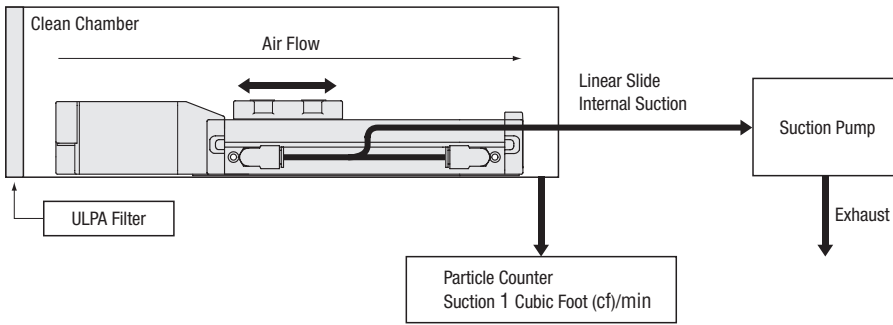
The bearings for the ball screw, guide and table roller use clean room grease with reduced dust-generative properties.



## Dust Generation

### Measurement Method

Clean room level measurements are done in accordance with "JIS B 9926."



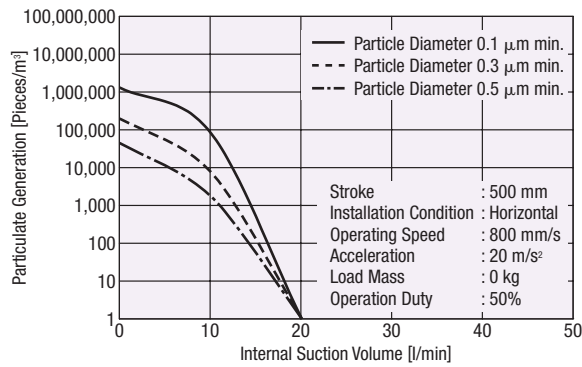
### ISO Standards

Class/Particle Size (μm)	Class 3
0.1	1000 max.
0.3	102 max.
0.5	35 max.

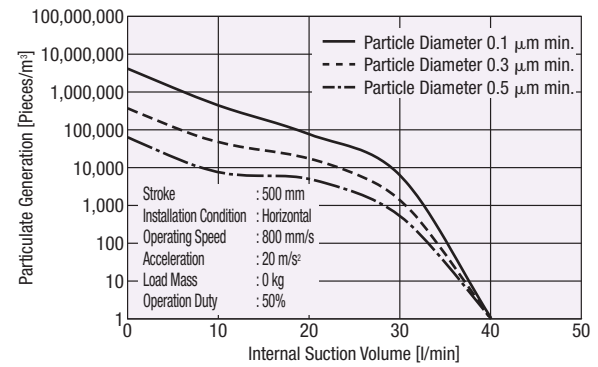
### Correlation Diagram of Dust-Generation and Suction

Amount (Actual measurement value sample data)

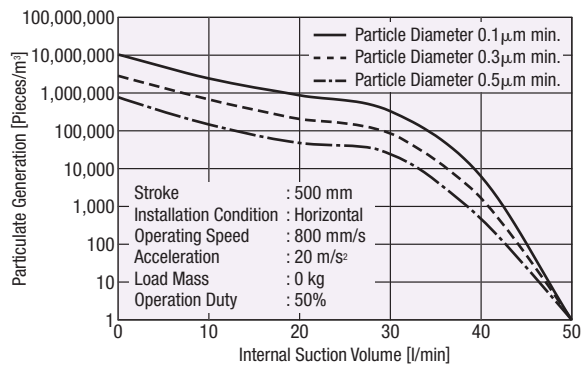
#### ◆ EZS3D050C1-A



#### ◆ EZS4D050C1-A



#### ◆ EZS6D050C1-A



## General Specifications of Motor General Specifications of Controllers → Page E-67

These are the values after rated operation under normal ambient temperature and humidity.

### ● 24 VDC

Item	Specifications
Insulation Resistance	The measured value is 100 MΩ min. when a 500 VDC megger is applied between the following places: • Motor Case – Excitation and Sensor Windings • Motor Case – Electromagnetic Brake Windings (Only for electromagnetic brake type)
Dielectric Strength	No abnormality is judged even with application between the following places for 1 minute: • Motor case – Excitation and Sensor Windings 0.5 kVAC 50 Hz • Motor case – Electromagnetic Brake Windings 0.5 kVAC 50 Hz (Only for electromagnetic brake type)
Operating Ambient Temperature	0~+40°C (non-freezing)
Operating Ambient Humidity	85% max. (non-condensing)

#### Note

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

### ● Single-Phase 100-115 VAC/Single-Phase 200-230 VAC

Item	Specifications
Insulation Resistance	The measured value is 100 MΩ min. when a 500 VDC megger is applied between the following places: • Motor Case – Excitation and Sensor Windings • Motor Case – Electromagnetic Brake Windings (Only for electromagnetic brake type)
Dielectric Strength	No abnormality is judged even with application between the following places for 1 minute: • Motor Case – Excitation and Sensor Windings EZS3-EZS4: 1.0 kVAC 50 Hz EZS6: 1.5 kVAC 50 Hz • Motor Case – Electromagnetic Brake Windings 1.0 kVAC 50 Hz (Only for electromagnetic brake type)
Operating Ambient Temperature	0~+40°C (non-freezing)
Operating Ambient Humidity	85% max. (non-condensing)

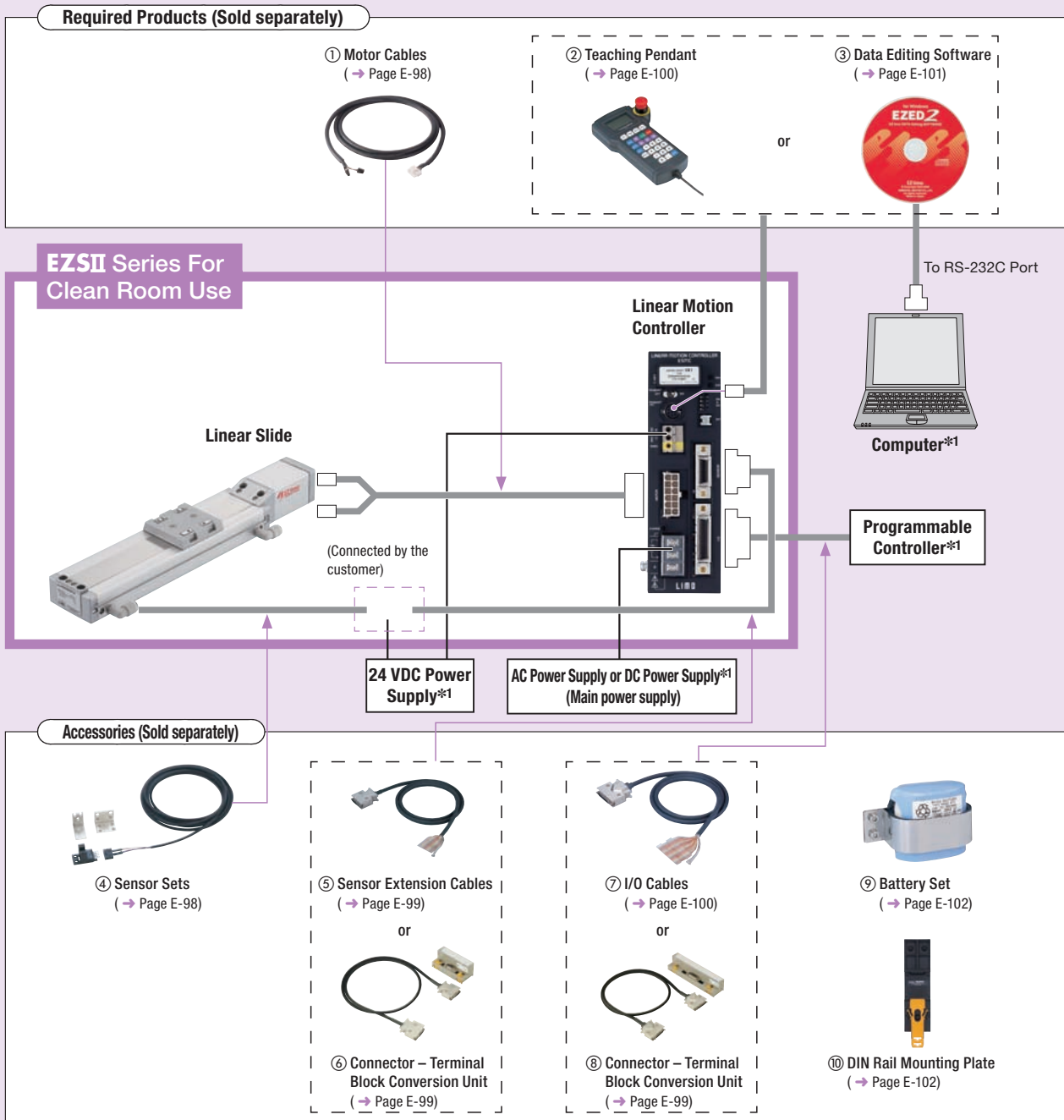
#### Note

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

## System Configuration

### Using in Controller Mode

\*1 Not supplied



Number	Name	Overview	Page
①	Motor Cables	This dedicated cable connects the linear slide and linear motion controller (1~20 m). Be sure to purchase this cable.	E-98
②	Teaching Pendant	Various data can be set and operated at your fingertips. The cable length is 5 m.	E-100
③	Data Editing Software	Various data can be set and edited on a personal computer. A dedicated communication cable is included (5 m).	E-101
④	Sensor Sets	Three sets of sensors, sensor mounting brackets and cables with connector (2 m), as well as a shielding plate.	E-98
⑤	Sensor Extension Cables	Cable for connecting the linear motion controller and sensor (1 m, 2 m).	E-99
⑥	Connector – Terminal Block Conversion Unit	Set of terminal block and cable for connecting the linear motion controller and sensor (1 m).	E-99
⑦	I/O Cables	Cable for connecting the linear motion controller and programmable controller (1 m, 2 m).	E-100
⑧	Connector – Terminal Block Conversion Unit	Set of terminal block and cable for connecting the linear motion controller and sensor (1 m).	E-99
⑨	Battery Set	Required for use in the absolute mode.	E-102
⑩	DIN Rail Mounting Plate	Use this when installing the linear motion controller to a DIN rail.	E-102

### System Configuration Example

EZSII Series	Sold Separately		+	Sold Separately		
	Motor Cable (2 m)	Teaching Pendant		I/O Cable (1 m)	Sensor Extension Cable*2 (2 m)	Sensor Set*2
<b>EZS3D015C1-A</b>	<b>CC020ES-2</b>	<b>EZT1</b>		<b>CC36D1-1</b>	<b>CC20D2-1</b>	<b>PAES-S</b>

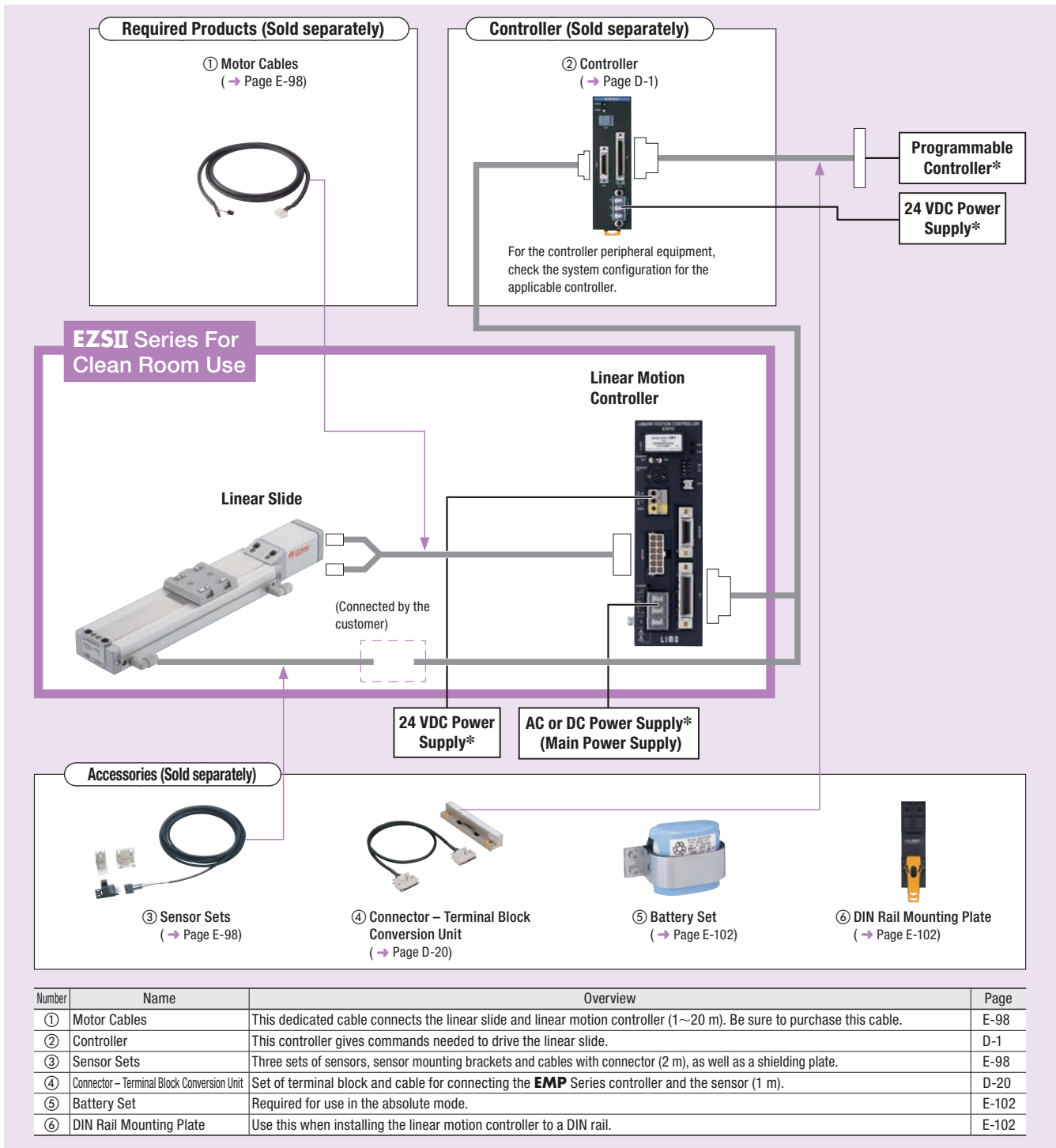
\*2 Not required if a sensorless return-to-home operation is performed.

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

● **Using in Driver Mode**

An example of a single-axis system configuration with the **EMP400** Series controller is shown below. When performing return-to-home operation using the linear motion controller, refer to the system configuration example on page E-78. Teaching pendant or data editing software is required to change parameters (I/O logic, velocity filter, etc.) of the linear motion controller.

\*Not supplied



● **System Configuration Example**



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

## Product Number Code

**EZS 3 D 050 C M 1 - K**

①    ②    ③    ④    ⑤    ⑥    ⑦    ⑧

①	Series Name	<b>EZS: EZSII Series</b>		
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>020:</b> 200 mm <b>035:</b> 350 mm <b>050:</b> 500 mm <b>065:</b> 650 mm <b>080:</b> 800 mm	<b>010:</b> 100 mm <b>025:</b> 250 mm <b>040:</b> 400 mm <b>055:</b> 550 mm <b>070:</b> 700 mm <b>085:</b> 850 mm	<b>015:</b> 150 mm <b>030:</b> 300 mm <b>045:</b> 450 mm <b>060:</b> 600 mm <b>075:</b> 750 mm
⑤	For Clean Room Use			
⑥	Electromagnetic Brake	Blank: Without Electromagnetic Brake <b>M:</b> With Electromagnetic Brake		
⑦	Direction of Air Couplers for Suction	<b>1:</b> Right <b>2:</b> Left		
⑧	Power Supply Voltage	<b>K:</b> 24 VDC <b>A:</b> Single-Phase 100-115 VAC <b>C:</b> Single-Phase 200-230 VAC		

## Product Line

50 mm increments

### EZS3

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
	Product Name	Product Name	Product Name	Product Name	Product Name	Product Name
50 mm	EZS3□005C□-K	EZS3□005C□-A	EZS3□005C□-C	EZS3□005CM□-K	EZS3□005CM□-A	EZS3□005CM□-C
100 mm	EZS3□010C□-K	EZS3□010C□-A	EZS3□010C□-C	EZS3□010CM□-K	EZS3□010CM□-A	EZS3□010CM□-C
150 mm	EZS3□015C□-K	EZS3□015C□-A	EZS3□015C□-C	EZS3□015CM□-K	EZS3□015CM□-A	EZS3□015CM□-C
200 mm	EZS3□020C□-K	EZS3□020C□-A	EZS3□020C□-C	EZS3□020CM□-K	EZS3□020CM□-A	EZS3□020CM□-C
250 mm	EZS3□025C□-K	EZS3□025C□-A	EZS3□025C□-C	EZS3□025CM□-K	EZS3□025CM□-A	EZS3□025CM□-C
300 mm	EZS3□030C□-K	EZS3□030C□-A	EZS3□030C□-C	EZS3□030CM□-K	EZS3□030CM□-A	EZS3□030CM□-C
350 mm	EZS3□035C□-K	EZS3□035C□-A	EZS3□035C□-C	EZS3□035CM□-K	EZS3□035CM□-A	EZS3□035CM□-C
400 mm	EZS3□040C□-K	EZS3□040C□-A	EZS3□040C□-C	EZS3□040CM□-K	EZS3□040CM□-A	EZS3□040CM□-C
450 mm	EZS3□045C□-K	EZS3□045C□-A	EZS3□045C□-C	EZS3□045CM□-K	EZS3□045CM□-A	EZS3□045CM□-C
500 mm	EZS3□050C□-K	EZS3□050C□-A	EZS3□050C□-C	EZS3□050CM□-K	EZS3□050CM□-A	EZS3□050CM□-C
550 mm	EZS3□055C□-K	EZS3□055C□-A	EZS3□055C□-C	EZS3□055CM□-K	EZS3□055CM□-A	EZS3□055CM□-C
600 mm	EZS3□060C□-K	EZS3□060C□-A	EZS3□060C□-C	EZS3□060CM□-K	EZS3□060CM□-A	EZS3□060CM□-C
650 mm	EZS3□065C□-K	EZS3□065C□-A	EZS3□065C□-C	EZS3□065CM□-K	EZS3□065CM□-A	EZS3□065CM□-C
700 mm	EZS3□070C□-K	EZS3□070C□-A	EZS3□070C□-C	EZS3□070CM□-K	EZS3□070CM□-A	EZS3□070CM□-C

● A **D** (12 mm lead) or **E** (6 mm lead) indicating the lead is entered where the box □ is located within the product name.

A number **1** (right) or **2** (left) indicating the direction of the air couplers for suction is entered where the box □ is located within the product name.

### EZS4

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
	Product Name	Product Name	Product Name	Product Name	Product Name	Product Name
50 mm	EZS4□005C□-K	EZS4□005C□-A	EZS4□005C□-C	EZS4□005CM□-K	EZS4□005CM□-A	EZS4□005CM□-C
100 mm	EZS4□010C□-K	EZS4□010C□-A	EZS4□010C□-C	EZS4□010CM□-K	EZS4□010CM□-A	EZS4□010CM□-C
150 mm	EZS4□015C□-K	EZS4□015C□-A	EZS4□015C□-C	EZS4□015CM□-K	EZS4□015CM□-A	EZS4□015CM□-C
200 mm	EZS4□020C□-K	EZS4□020C□-A	EZS4□020C□-C	EZS4□020CM□-K	EZS4□020CM□-A	EZS4□020CM□-C
250 mm	EZS4□025C□-K	EZS4□025C□-A	EZS4□025C□-C	EZS4□025CM□-K	EZS4□025CM□-A	EZS4□025CM□-C
300 mm	EZS4□030C□-K	EZS4□030C□-A	EZS4□030C□-C	EZS4□030CM□-K	EZS4□030CM□-A	EZS4□030CM□-C
350 mm	EZS4□035C□-K	EZS4□035C□-A	EZS4□035C□-C	EZS4□035CM□-K	EZS4□035CM□-A	EZS4□035CM□-C
400 mm	EZS4□040C□-K	EZS4□040C□-A	EZS4□040C□-C	EZS4□040CM□-K	EZS4□040CM□-A	EZS4□040CM□-C
450 mm	EZS4□045C□-K	EZS4□045C□-A	EZS4□045C□-C	EZS4□045CM□-K	EZS4□045CM□-A	EZS4□045CM□-C
500 mm	EZS4□050C□-K	EZS4□050C□-A	EZS4□050C□-C	EZS4□050CM□-K	EZS4□050CM□-A	EZS4□050CM□-C
550 mm	EZS4□055C□-K	EZS4□055C□-A	EZS4□055C□-C	EZS4□055CM□-K	EZS4□055CM□-A	EZS4□055CM□-C
600 mm	EZS4□060C□-K	EZS4□060C□-A	EZS4□060C□-C	EZS4□060CM□-K	EZS4□060CM□-A	EZS4□060CM□-C
650 mm	EZS4□065C□-K	EZS4□065C□-A	EZS4□065C□-C	EZS4□065CM□-K	EZS4□065CM□-A	EZS4□065CM□-C
700 mm	EZS4□070C□-K	EZS4□070C□-A	EZS4□070C□-C	EZS4□070CM□-K	EZS4□070CM□-A	EZS4□070CM□-C

● A **D** (12 mm lead) or **E** (6 mm lead) indicating the lead is entered where the box □ is located within the product name.

A number **1** (right) or **2** (left) indicating the direction of the air couplers for suction is entered where the box □ is located within the product name.



**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
	Product Name	Product Name	Product Name	Product Name	Product Name	Product Name
50 mm	<b>EZS6□005C□-K</b>	<b>EZS6□005C□-A</b>	<b>EZS6□005C□-C</b>	<b>EZS6□005CM□-K</b>	<b>EZS6□005CM□-A</b>	<b>EZS6□005CM□-C</b>
100 mm	<b>EZS6□010C□-K</b>	<b>EZS6□010C□-A</b>	<b>EZS6□010C□-C</b>	<b>EZS6□010CM□-K</b>	<b>EZS6□010CM□-A</b>	<b>EZS6□010CM□-C</b>
150 mm	<b>EZS6□015C□-K</b>	<b>EZS6□015C□-A</b>	<b>EZS6□015C□-C</b>	<b>EZS6□015CM□-K</b>	<b>EZS6□015CM□-A</b>	<b>EZS6□015CM□-C</b>
200 mm	<b>EZS6□020C□-K</b>	<b>EZS6□020C□-A</b>	<b>EZS6□020C□-C</b>	<b>EZS6□020CM□-K</b>	<b>EZS6□020CM□-A</b>	<b>EZS6□020CM□-C</b>
250 mm	<b>EZS6□025C□-K</b>	<b>EZS6□025C□-A</b>	<b>EZS6□025C□-C</b>	<b>EZS6□025CM□-K</b>	<b>EZS6□025CM□-A</b>	<b>EZS6□025CM□-C</b>
300 mm	<b>EZS6□030C□-K</b>	<b>EZS6□030C□-A</b>	<b>EZS6□030C□-C</b>	<b>EZS6□030CM□-K</b>	<b>EZS6□030CM□-A</b>	<b>EZS6□030CM□-C</b>
350 mm	<b>EZS6□035C□-K</b>	<b>EZS6□035C□-A</b>	<b>EZS6□035C□-C</b>	<b>EZS6□035CM□-K</b>	<b>EZS6□035CM□-A</b>	<b>EZS6□035CM□-C</b>
400 mm	<b>EZS6□040C□-K</b>	<b>EZS6□040C□-A</b>	<b>EZS6□040C□-C</b>	<b>EZS6□040CM□-K</b>	<b>EZS6□040CM□-A</b>	<b>EZS6□040CM□-C</b>
450 mm	<b>EZS6□045C□-K</b>	<b>EZS6□045C□-A</b>	<b>EZS6□045C□-C</b>	<b>EZS6□045CM□-K</b>	<b>EZS6□045CM□-A</b>	<b>EZS6□045CM□-C</b>
500 mm	<b>EZS6□050C□-K</b>	<b>EZS6□050C□-A</b>	<b>EZS6□050C□-C</b>	<b>EZS6□050CM□-K</b>	<b>EZS6□050CM□-A</b>	<b>EZS6□050CM□-C</b>
550 mm	<b>EZS6□055C□-K</b>	<b>EZS6□055C□-A</b>	<b>EZS6□055C□-C</b>	<b>EZS6□055CM□-K</b>	<b>EZS6□055CM□-A</b>	<b>EZS6□055CM□-C</b>
600 mm	<b>EZS6□060C□-K</b>	<b>EZS6□060C□-A</b>	<b>EZS6□060C□-C</b>	<b>EZS6□060CM□-K</b>	<b>EZS6□060CM□-A</b>	<b>EZS6□060CM□-C</b>
650 mm	<b>EZS6□065C□-K</b>	<b>EZS6□065C□-A</b>	<b>EZS6□065C□-C</b>	<b>EZS6□065CM□-K</b>	<b>EZS6□065CM□-A</b>	<b>EZS6□065CM□-C</b>
700 mm	<b>EZS6□070C□-K</b>	<b>EZS6□070C□-A</b>	<b>EZS6□070C□-C</b>	<b>EZS6□070CM□-K</b>	<b>EZS6□070CM□-A</b>	<b>EZS6□070CM□-C</b>
750 mm	<b>EZS6□075C□-K</b>	<b>EZS6□075C□-A</b>	<b>EZS6□075C□-C</b>	<b>EZS6□075CM□-K</b>	<b>EZS6□075CM□-A</b>	<b>EZS6□075CM□-C</b>
800 mm	<b>EZS6□080C□-K</b>	<b>EZS6□080C□-A</b>	<b>EZS6□080C□-C</b>	<b>EZS6□080CM□-K</b>	<b>EZS6□080CM□-A</b>	<b>EZS6□080CM□-C</b>
850 mm	<b>EZS6□085C□-K</b>	<b>EZS6□085C□-A</b>	<b>EZS6□085C□-C</b>	<b>EZS6□085CM□-K</b>	<b>EZS6□085CM□-A</b>	<b>EZS6□085CM□-C</b>

● **A** D (12 mm lead) or **E** (6 mm lead) indicating the lead is entered where the box □ is located within the product name.

A number **1** (right) or **2** (left) indicating the direction of the air couplers for suction is entered where the box □ is located within the product name.

— The following items are included in each product.

Linear Slide, Hexagonal Socket Head Screw for Mounting Linear Slide, Controller, Controller Mounting Bracket, User I/O Connector, Sensor I/O Connector, Operating Manual

## Custom-Design Program "FACE"

"FACE" is a program that lets you custom-design a product quickly according to your specific requirements and specifications.

The **EZSII** Series is available with various strokes specifiable in increments of 10 mm, so you can always have the desired linear slide with the stroke you need.

### Product Number Code

# EZS 3 D 050 C M 1 - K

①    ②    ③    ④    ⑤    ⑥    ⑦    ⑧

①	Series Name	<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>006~009:</b> 60~90 mm <b>016~019:</b> 160~190 mm <b>026~029:</b> 260~290 mm <b>036~039:</b> 360~390 mm <b>046~049:</b> 460~490 mm <b>056~059:</b> 560~590 mm <b>066~069:</b> 660~690 mm <b>076~079:</b> 760~790 mm	<b>011~014:</b> 110~140 mm <b>021~024:</b> 210~240 mm <b>031~034:</b> 310~340 mm <b>041~044:</b> 410~440mm <b>051~054:</b> 510~540 mm <b>061~064:</b> 610~640 mm <b>071~074:</b> 710~740 mm <b>081~084:</b> 810~840 mm
⑤	For Clean Room Use		
⑥	Electromagnetic Brake	Blank: Without Electromagnetic Brake <b>M:</b> With Electromagnetic Brake	
⑦	Direction of Air Couplers for Suction	<b>1:</b> Right <b>2:</b> Left	
⑧	Power Supply Voltage	<b>K:</b> 24 VDC <b>A:</b> Single-Phase 100-115 VAC <b>C:</b> Single-Phase 200-230 VAC	

## Product Line

10 mm increments 

### EZS3

Stroke (10 mm increments)		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
	Numbers Specifiable in the Box □	Product Name	Product Name	Product Name	Product Name	Product Name	Product Name
60~90 mm	<b>006~009</b>	<b>EZS3D</b> □□□□ <b>-K</b> <b>EZS3E</b> □□□□ <b>-K</b>	<b>EZS3D</b> □□□□ <b>-A</b> <b>EZS3E</b> □□□□ <b>-A</b>	<b>EZS3D</b> □□□□ <b>-C</b> <b>EZS3E</b> □□□□ <b>-C</b>	<b>EZS3D</b> □□□□ <b>CM</b> □□ <b>-K</b> <b>EZS3E</b> □□□□ <b>CM</b> □□ <b>-K</b>	<b>EZS3D</b> □□□□ <b>CM</b> □□ <b>-A</b> <b>EZS3E</b> □□□□ <b>CM</b> □□ <b>-A</b>	<b>EZS3D</b> □□□□ <b>CM</b> □□ <b>-C</b> <b>EZS3E</b> □□□□ <b>CM</b> □□ <b>-C</b>
110~140 mm	<b>011~014</b>						
160~190 mm	<b>016~019</b>						
210~240 mm	<b>021~024</b>						
260~290 mm	<b>026~029</b>						
310~340 mm	<b>031~034</b>						
360~390 mm	<b>036~039</b>						
410~440 mm	<b>041~044</b>						
460~490 mm	<b>046~049</b>						
510~540 mm	<b>051~054</b>						
560~590 mm	<b>056~059</b>						
610~640 mm	<b>061~064</b>						
660~690 mm	<b>066~069</b>						

● A number (**006~069**) indicating the stroke length is entered where the box □ is located within the product name.

A number **1** (right) or **2** (left) indicating the direction of the air couplers for suction is entered where the box □ is located within the product name.

### EZS4

Stroke (10 mm increments)		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
	Numbers Specifiable in the Box □	Product Name	Product Name	Product Name	Product Name	Product Name	Product Name
60~90 mm	<b>006~009</b>	<b>EZS4D</b> □□□□ <b>-K</b> <b>EZS4E</b> □□□□ <b>-K</b>	<b>EZS4D</b> □□□□ <b>-A</b> <b>EZS4E</b> □□□□ <b>-A</b>	<b>EZS4D</b> □□□□ <b>-C</b> <b>EZS4E</b> □□□□ <b>-C</b>	<b>EZS4D</b> □□□□ <b>CM</b> □□ <b>-K</b> <b>EZS4E</b> □□□□ <b>CM</b> □□ <b>-K</b>	<b>EZS4D</b> □□□□ <b>CM</b> □□ <b>-A</b> <b>EZS4E</b> □□□□ <b>CM</b> □□ <b>-A</b>	<b>EZS4D</b> □□□□ <b>CM</b> □□ <b>-C</b> <b>EZS4E</b> □□□□ <b>CM</b> □□ <b>-C</b>
110~140 mm	<b>011~014</b>						
160~190 mm	<b>016~019</b>						
210~240 mm	<b>021~024</b>						
260~290 mm	<b>026~029</b>						
310~340 mm	<b>031~034</b>						
360~390 mm	<b>036~039</b>						
410~440 mm	<b>041~044</b>						
460~490 mm	<b>046~049</b>						
510~540 mm	<b>051~054</b>						
560~590 mm	<b>056~059</b>						
610~640 mm	<b>061~064</b>						
660~690 mm	<b>066~069</b>						

● A number (**006~069**) indicating the stroke length is entered where the box □ is located within the product name.

A number **1** (right) or **2** (left) indicating the direction of the air couplers for suction is entered where the box □ is located within the product name.

**EZS6**

Stroke (10 mm increments)		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
	Numbers Specifiable in the Box □	Product Name	Product Name	Product Name	Product Name	Product Name	Product Name
60~90 mm	<b>006~009</b>	<b>EZS6D□C□-K</b> <b>EZS6E□C□-K</b>	<b>EZS6D□C□-A</b> <b>EZS6E□C□-A</b>	<b>EZS6D□C□-C</b> <b>EZS6E□C□-C</b>	<b>EZS6D□CM□-K</b> <b>EZS6E□CM□-K</b>	<b>EZS6D□CM□-A</b> <b>EZS6E□CM□-A</b>	<b>EZS6D□CM□-C</b> <b>EZS6E□CM□-C</b>
110~140 mm	<b>011~014</b>						
160~190 mm	<b>016~019</b>						
210~240 mm	<b>021~024</b>						
260~290 mm	<b>026~029</b>						
310~340 mm	<b>031~034</b>						
360~390 mm	<b>036~039</b>						
410~440 mm	<b>041~044</b>						
460~490 mm	<b>046~049</b>						
510~540 mm	<b>051~054</b>						
560~590 mm	<b>056~059</b>						
610~640 mm	<b>061~064</b>						
660~690 mm	<b>066~069</b>						
710~740 mm	<b>071~074</b>						
760~790 mm	<b>076~079</b>						
810~840 mm	<b>081~084</b>						

- A number **(006~084)** indicating the stroke length is entered where the box □ is located within the product name.
- A number **1** (right) or **2** (left) indicating the direction of the air couplers for suction is entered where the box □ is located within the product name.

The following items are included in each product.  
Linear Slide, Hexagonal Socket Head Screw for Mounting Linear Slide, Controller, Controller Mounting Bracket, User I/O Connector, Sensor I/O Connector, Operating Manual

**General Specifications of Motor** General Specifications of Controllers → Page E-67

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

**24 VDC**

Item	Specifications
Insulation Resistance	The measured value is 100 MΩ min. when a 500 VDC megger is applied between the following places: <ul style="list-style-type: none"> <li>• Motor Case – Excitation and Sensor Windings</li> <li>• Motor Case – Electromagnetic Brake Windings (Only for electromagnetic brake type)</li> </ul>
Dielectric Strength	No abnormality is judged even with application between the following places for 1 minute: <ul style="list-style-type: none"> <li>• Motor Case – Excitation and Sensor Windings 0.5 kVAC 50 Hz</li> <li>• Motor Case – Electromagnetic Brake Windings (Only for electromagnetic brake type) 0.5 kVAC 50 Hz</li> </ul>
Operating Ambient Temperature	0~+40°C (non-freezing)
Operating Ambient Humidity	85% max. (non-condensing)

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

**Single-Phase 100-115 VAC/Single-Phase 200-230 VAC**

Item	Specifications
Insulation Resistance	The measured value is 100 MΩ min. when a 500 VDC megger is applied between the following places: <ul style="list-style-type: none"> <li>• Motor Case – Excitation and Sensor Windings</li> <li>• Motor Case – Electromagnetic Brake Windings (Only for electromagnetic brake type)</li> </ul>
Dielectric Strength	No abnormality is judged even with application between the following places for 1 minute: <ul style="list-style-type: none"> <li>• Motor Case – Excitation and Sensor Windings <b>EZS3-EZS4:</b> 1.0 kVAC 50 Hz <b>EZS6:</b> 1.5 kVAC 50 Hz</li> <li>• Motor Case – Electromagnetic Brake Windings (Only for electromagnetic brake type) 1.0 kVAC 50 Hz</li> </ul>
Operating Ambient Temperature	0~+40°C (non-freezing)
Operating Ambient Humidity	85% max. (non-condensing)

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

**EZSII Series for Clean Room Use**

**EZS3: Width 54 mm × Height 50 mm 24 VDC**

Maximum Transportable Mass: Horizontal 15 kg/Vertical 7 kg  
 Stroke: 50 to 700 mm (10 mm increments)



**Linear Slide Specifications (RoHS)**

Drive System	Ball Screw	Repetitive Positioning Accuracy [mm]	±0.02	Resolution [mm]	0.01	Traveling Parallelism [mm]	0.03*	Dynamic Permissible Moment [N·m]	M <sub>r</sub> : 4.2 M <sub>v</sub> : 4.2 M <sub>a</sub> : 10.5
								Static Permissible Moment [N·m]	M <sub>r</sub> : 26.4 M <sub>v</sub> : 26.4 M <sub>a</sub> : 52.0

Product Name	Lead [mm]	Transportable Mass [kg]		Thrust [N]	Electromagnetic Brake Holding Force [N]	Maximum Speed (Stroke) [mm/s]			
		Horizontal	Vertical			50~550 mm	560~600 mm	610~650 mm	660~700 mm
<b>EZS3D</b> □□□□- <b>K</b>	12	~7.5	—	~43	—	600	550	460	400
<b>EZS3D</b> □□ <b>CM</b> □□- <b>K</b>			~3.5		43				
<b>EZS3E</b> □□□□- <b>K</b>	6	~15	—	~86	—	300	270	220	200
<b>EZS3E</b> □□□□ <b>CM</b> □□- <b>K</b>			~7		86				

- A number indicating the stroke length is entered where the box □ is located within the product name.
- A number **1** (right) or **2** (left) indicating the direction of the air coupler for suction is entered where the box □ is located within the product name.
- \*This value applies when the linear slide is installed from the base surface.

**Product Number Code**

**EZS 3 D 050 C M 1 - K**

- ① ② ③ ④ ⑤ ⑥ ⑦ ⑧

①	Series Name <b>EZS: EZSII Series</b>
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	For Clean Room Use
⑥	Electromagnetic Brake Blank: Without Electromagnetic Brake <b>M</b> : With Electromagnetic Brake
⑦	Direction of Air Couplers for Suction <b>1</b> : Right <b>2</b> : Left
⑧	Power Supply Voltage <b>K</b> : 24 VDC

**Linear Slide and Controller Combinations**

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

Electromagnetic Brake	Product Name	Linear Slide Product Name	Controller Product Name
Not Equipped	<b>EZS3D</b> □□□□- <b>K</b>	EZSM3D□□□□K	ESMC-K2
	<b>EZS3E</b> □□□□- <b>K</b>	EZSM3E□□□□K	
Equipped	<b>EZS3D</b> □□ <b>CM</b> □□- <b>K</b>	EZSM3D□□ <b>CM</b> □□K	
	<b>EZS3E</b> □□ <b>CM</b> □□- <b>K</b>	EZSM3E□□ <b>CM</b> □□K	

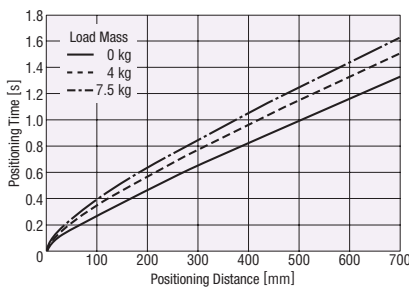
- A number indicating the stroke length is entered where the box □ is located within the product name.
- A number **1** (right) or **2** (left) indicating the direction of the air couplers for suction is entered where the box □ is located within the product name.

**Positioning Distance – Positioning Time**

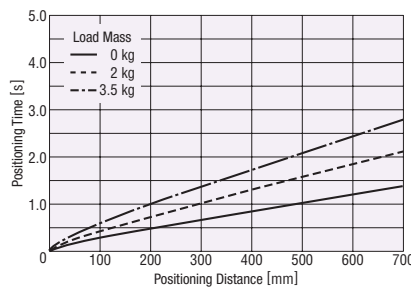
The positioning time (reference) can be checked from the positioning distance. A reference value for the positioning time can be calculated by multiplying the positioning time calculated from the graph with the positioning time coefficient for the applicable stroke. Refer to page G-19 for operating speed and acceleration.

**EZS3D (12 mm lead)**

◇ Horizontal Direction Installation



◇ Vertical Direction Installation

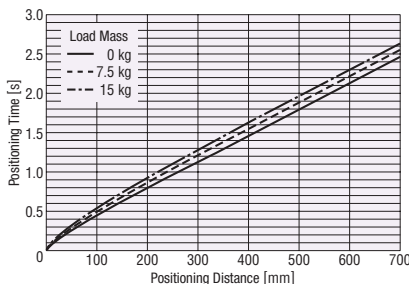


**Positioning Time Coefficient**

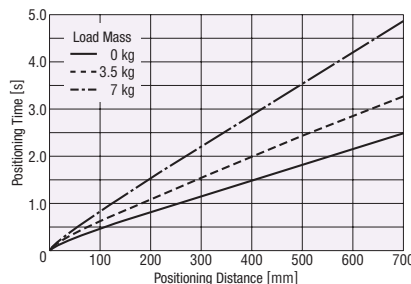
Stroke [mm]	Load Mass					
	Horizontal Direction Installation			Vertical Direction Installation		
	0 kg	4 kg	7.5 kg	0 kg	2 kg	3.5 kg
50~550	1.0	1.0	1.0	1.0	1.0	1.0
560~600	1.0	1.0	1.0	1.0	1.0	1.0
610~650	1.2	1.1	1.1	1.2	1.0	1.0
660~700	1.4	1.2	1.2	1.3	1.0	1.0

**EZS3E (6 mm lead)**

◇ Horizontal Direction Installation



◇ Vertical Direction Installation



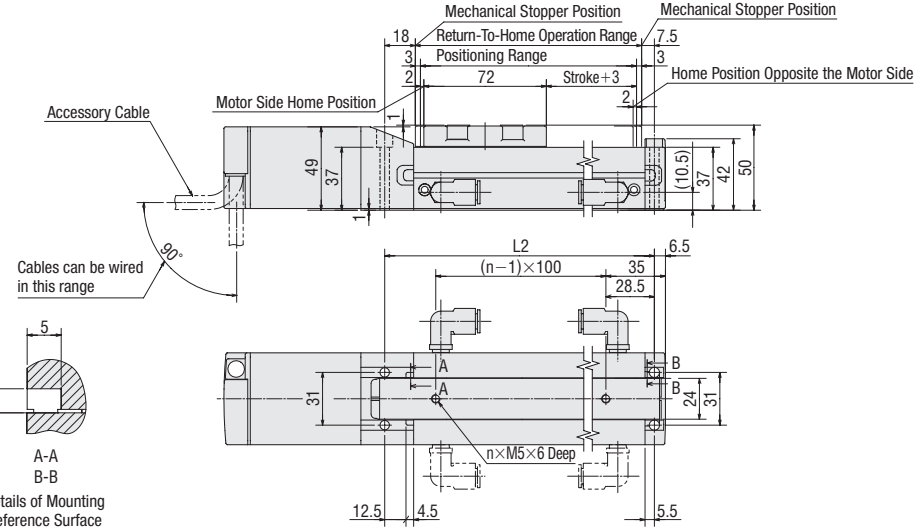
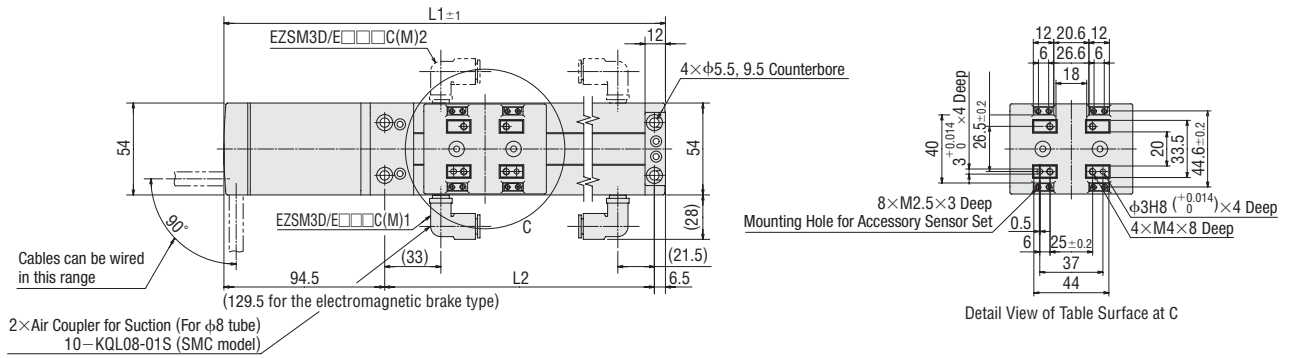
**Positioning Time Coefficient**

Stroke [mm]	Load Mass					
	Horizontal Direction Installation			Vertical Direction 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
560~600	1.1	1.1	1.1	1.1	1.0	1.0
610~650	1.3	1.3	1.2	1.3	1.0	1.0
660~700	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 or less as a reference. (Settling time is adjustable by the velocity filter function.)
- The starting speed should be 6 mm/s or less.

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



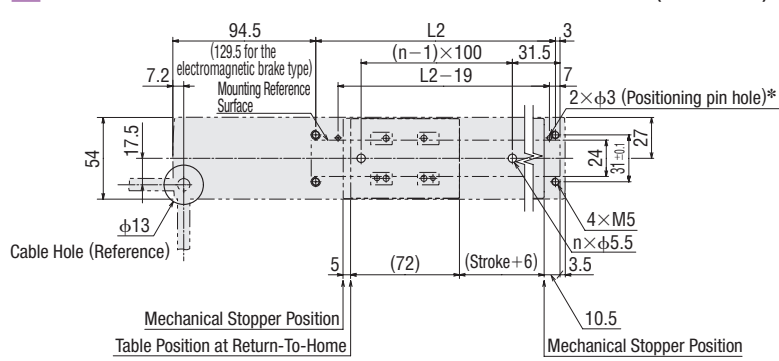
Number of Holes (n)

Stroke [mm]	n
50~120	2
130~220	3
230~320	4
330~420	5
430~520	6
530~620	7
630~700	8

Linear Slide Product Name: EZSM3D□□□□, EZSM3E□□□□ (Without electromagnetic brake)  
 EZSM3D□□□□, EZSM3E□□□□ (With electromagnetic brake)

	Electromagnetic Brake	Numbers Specifiable in the Box □ within the Linear Slide Product Name													
		005	010	015	020	025	030	035	040	045	050	055	060	065	070
Stroke [mm]	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
L1	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
CAD	Not Equipped	D1181	D1182	D1183	D1184	D1185	D1186	D1187	D1188	D1189	D1190	D1191	D1192	D1193	D1194
	Equipped	D1195	D1196	D1197	D1198	D1199	D1200	D1201	D1202	D1203	D1204	D1205	D1206	D1207	D1208

### 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.

#### Dimensions under the Custom-Design Program "FACE"

The following are dimensions under the custom-design program "FACE" with stroke in 10 mm increments.

- L1: 209.5 mm + Stroke [mm] (Overall length (L1) is 35 mm longer with electromagnetic brake.)
- L2: 108.5 mm + Stroke [mm]

• For CAD data, please contact the nearest Oriental Motor sales office.

## EZS II Series for Clean Room Use

# EZS3: Width 54 mm × Height 50 mm

Single-Phase 100-115 VAC  
Single-Phase 200-230 VAC



Maximum Transportable Mass: Horizontal 15 kg/Vertical 7 kg  
Stroke: 50 to 700 mm (10 mm increments)



### Linear Slide Specifications (RoHS)

Drive System	Ball Screw	Repetitive Positioning Accuracy [mm]	±0.02	Resolution [mm]	0.01	Traveling Parallelism [mm]	0.03*	Dynamic Permissible Moment [N·m]	M <sub>x</sub> : 4.2 M <sub>y</sub> : 4.2 M <sub>z</sub> : 10.5
								Static Permissible Moment [N·m]	M <sub>x</sub> : 26.4 M <sub>y</sub> : 26.4 M <sub>z</sub> : 52.0

Product Name	Lead [mm]	Transportable Mass [kg]		Thrust [N]	Electromagnetic Brake Holding Force [N]	Maximum Speed (Stroke) [mm/s]				
		Horizontal	Vertical			50~500 mm	510~550 mm	560~600 mm	610~650 mm	660~700 mm
EZS3D□C□-□	12	~7.5	—	~43	—	800	650	550	460	400
EZS3D□CM□-□			~3.5		43					
EZS3E□C□-□	6	~15	—	~86	—	400	320	270	220	200
EZS3E□CM□-□			~7		86					

- A number indicating the stroke length is entered where the box □ is located within the product name.
- A number **1** (right) or **2** (left) indicating the direction of the air couplers for suction is entered where the box □ is located within the product name.
- An **A** or **C** indicating the power supply input is entered where the box □ is located within the product name.
- \*This value applies when the linear slide is installed from the base surface.

### Product Number Code

# EZS 3 D 050 C M 1 - A

- ① ② ③ ④ ⑤ ⑥ ⑦ ⑧

①	Series Name <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	For Clean Room Use
⑥	Electromagnetic Brake Blank: Without Electromagnetic Brake <b>M</b> : With Electromagnetic Brake
⑦	Direction of Air Couplers for Suction <b>1</b> : Right <b>2</b> : Left
⑧	Power Supply Voltage <b>A</b> : Single-Phase 100-115 VAC <b>C</b> : Single-Phase 200-230 VAC

### Linear Slide and Controller Combinations

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

Electromagnetic Brake	Product Name	Linear Slide Product Name	Controller Product Name
Not Equipped	<b>EZS3D</b> □C□- <b>A</b>	EZSM3D□C□A	ESMC-A2
	<b>EZS3D</b> □C□- <b>C</b>	EZSM3D□C□C	ESMC-C2
	<b>EZS3E</b> □C□- <b>A</b>	EZSM3E□C□A	ESMC-A2
	<b>EZS3E</b> □C□- <b>C</b>	EZSM3E□C□C	ESMC-C2
Equipped	<b>EZS3D</b> □CM□- <b>A</b>	EZSM3D□CM□A	ESMC-A2
	<b>EZS3D</b> □CM□- <b>C</b>	EZSM3D□CM□C	ESMC-C2
	<b>EZS3E</b> □CM□- <b>A</b>	EZSM3E□CM□A	ESMC-A2
	<b>EZS3E</b> □CM□- <b>C</b>	EZSM3E□CM□C	ESMC-C2

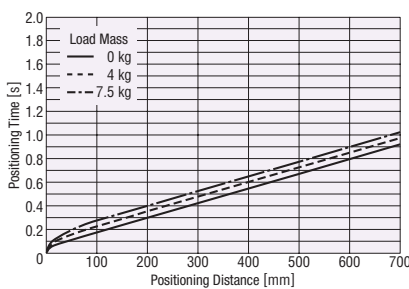
- A number indicating the stroke length is entered where the box □ is located within the product name.
- A number **1** (right) or **2** (left) indicating the direction of the air couplers for suction is entered where the box □ is located within the product name.

### Positioning Distance – Positioning Time

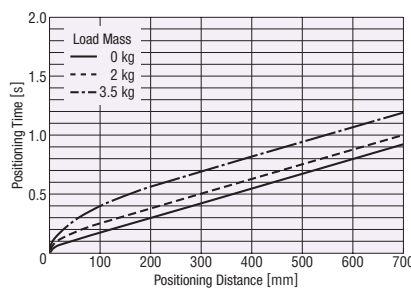
The positioning time (reference) can be checked from the positioning distance. A reference value for the positioning time can be calculated by multiplying the positioning time calculated from the graph with the positioning time coefficient for the applicable stroke. Refer to page G-19 for operating speed and acceleration.

#### ● EZS3D (12 mm lead)

##### ◇ Horizontal Direction Installation



##### ◇ Vertical Direction Installation

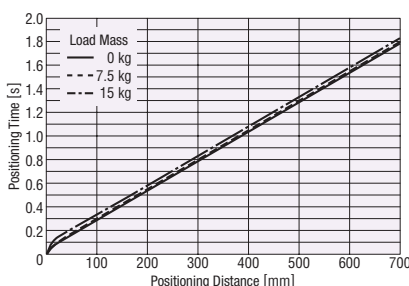


#### Positioning Time Coefficient

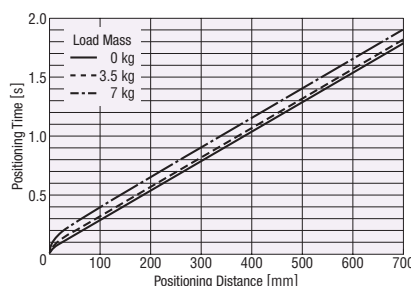
Stroke [mm]	Load Mass					
	Horizontal Direction Installation			Vertical Direction Installation		
	0 kg	4 kg	7.5 kg	0 kg	2 kg	3.5 kg
50~500	1.0	1.0	1.0	1.0	1.0	1.0
510~550	1.2	1.2	1.2	1.2	1.2	1.1
560~600	1.4	1.4	1.3	1.4	1.3	1.2
610~650	1.7	1.6	1.6	1.7	1.6	1.4
660~700	1.9	1.8	1.8	1.9	1.8	1.6

#### ● EZS3E (6 mm lead)

##### ◇ Horizontal Direction Installation



##### ◇ Vertical Direction Installation



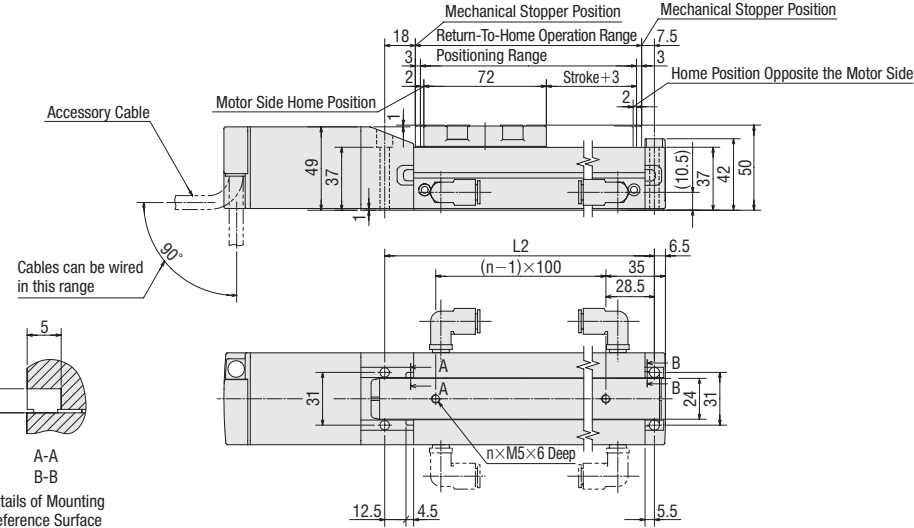
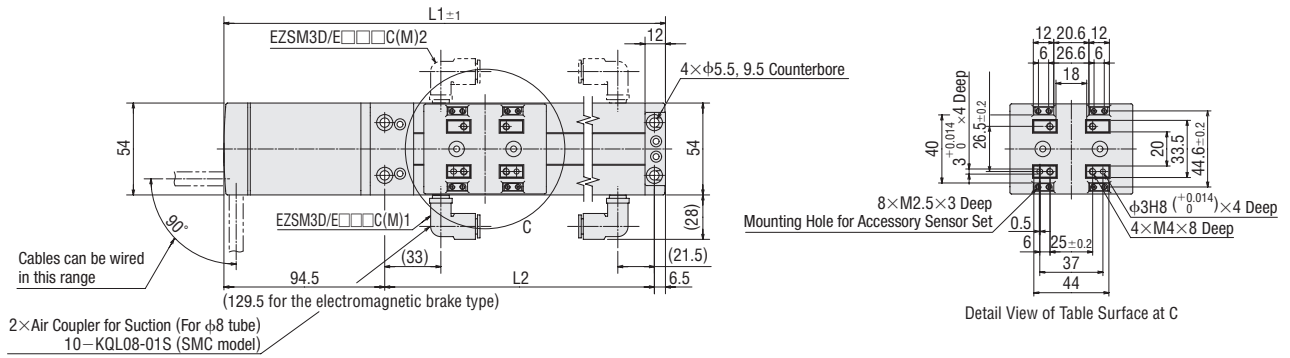
#### Positioning Time Coefficient

Stroke [mm]	Load Mass					
	Horizontal Direction Installation			Vertical Direction 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
510~550	1.2	1.2	1.2	1.2	1.2	1.2
560~600	1.5	1.4	1.4	1.5	1.4	1.4
610~650	1.8	1.8	1.8	1.8	1.8	1.7
660~700	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 or less as a reference. (Settling time is adjustable by the velocity filter function.)
- The starting speed should be 6 mm/s or less.

## Dimensions of Linear Slide (Unit = mm)



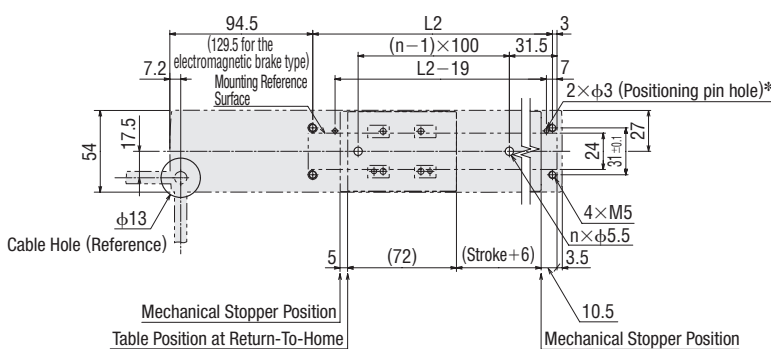
Number of Holes (n)

Stroke [mm]	n
50~120	2
130~220	3
230~320	4
330~420	5
430~520	6
530~620	7
630~700	8

Linear Slide Product Name: EZSM3D□□□□, EZSM3E□□□□ (Without electromagnetic brake)  
 EZSM3D□□□□, EZSM3E□□□□ (With electromagnetic brake)

	Electromagnetic Brake	Numbers Specifiable in the Box □ within the Linear Slide Product Name													
		005	010	015	020	025	030	035	040	045	050	055	060	065	070
Stroke [mm]	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
L1	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
CAD	Not Equipped	D1181	D1182	D1183	D1184	D1185	D1186	D1187	D1188	D1189	D1190	D1191	D1192	D1193	D1194
	Equipped	D1195	D1196	D1197	D1198	D1199	D1200	D1201	D1202	D1203	D1204	D1205	D1206	D1207	D1208

## 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.

### Dimensions under the Custom-Design Program "FACE"

The following are dimensions under the custom-design program "FACE" with stroke in 10 mm increments.

L1: 209.5 mm + Stroke [mm] (Overall length (L1) is 35 mm longer with electromagnetic brake.)

L2: 108.5 mm + Stroke [mm]

- For CAD data, please contact the nearest Oriental Motor sales office.