

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



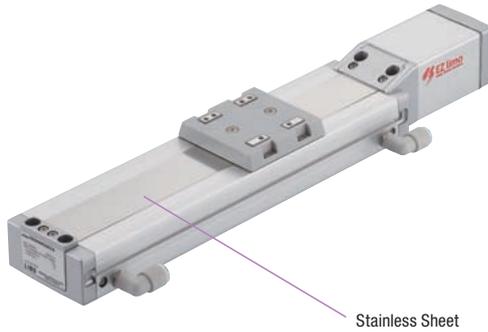
Features

● 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 m³ 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

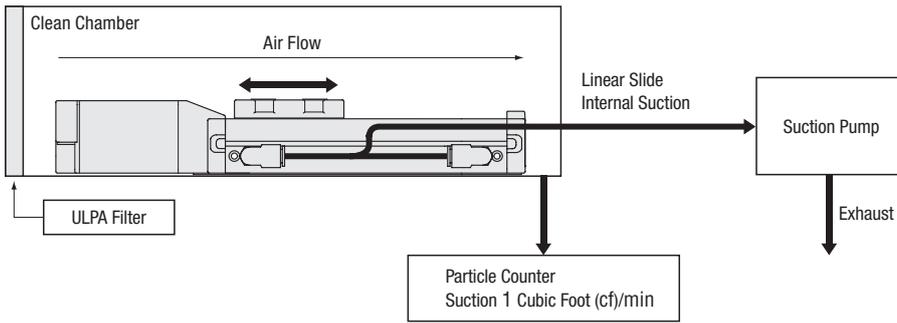
The bearings for the ball screw, guide and table roller use clean room grease with reduced dust-generative properties.



Dust Generation

Measurement Method

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

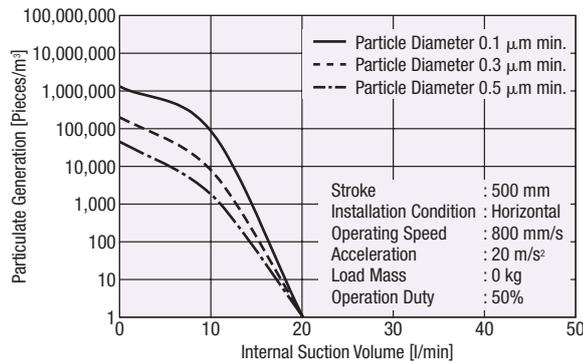


ISO Standards

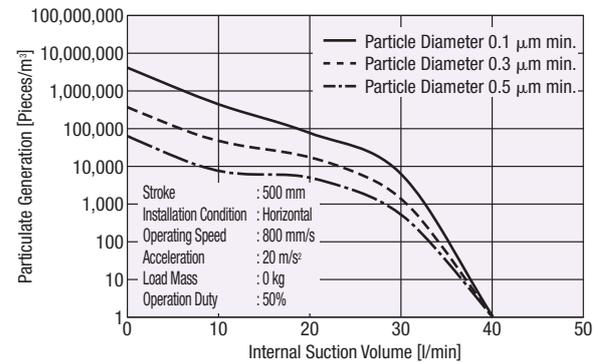
Class/Particle Size (μm)	Class 3
0.1	1000 max.
0.3	102 max.
0.5	35 max.

Correlation Diagram of Dust-Generation and Suction Amount (Actual measurement value sample data)

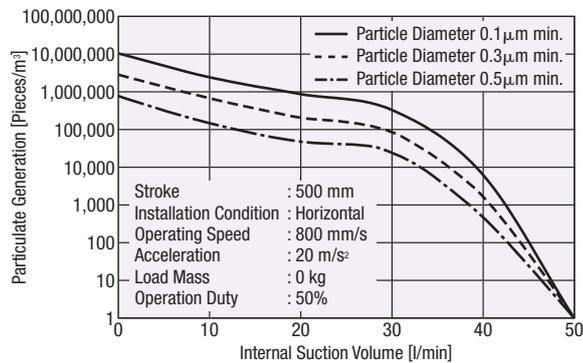
◆ EZS3D050C1-A



◆ 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)

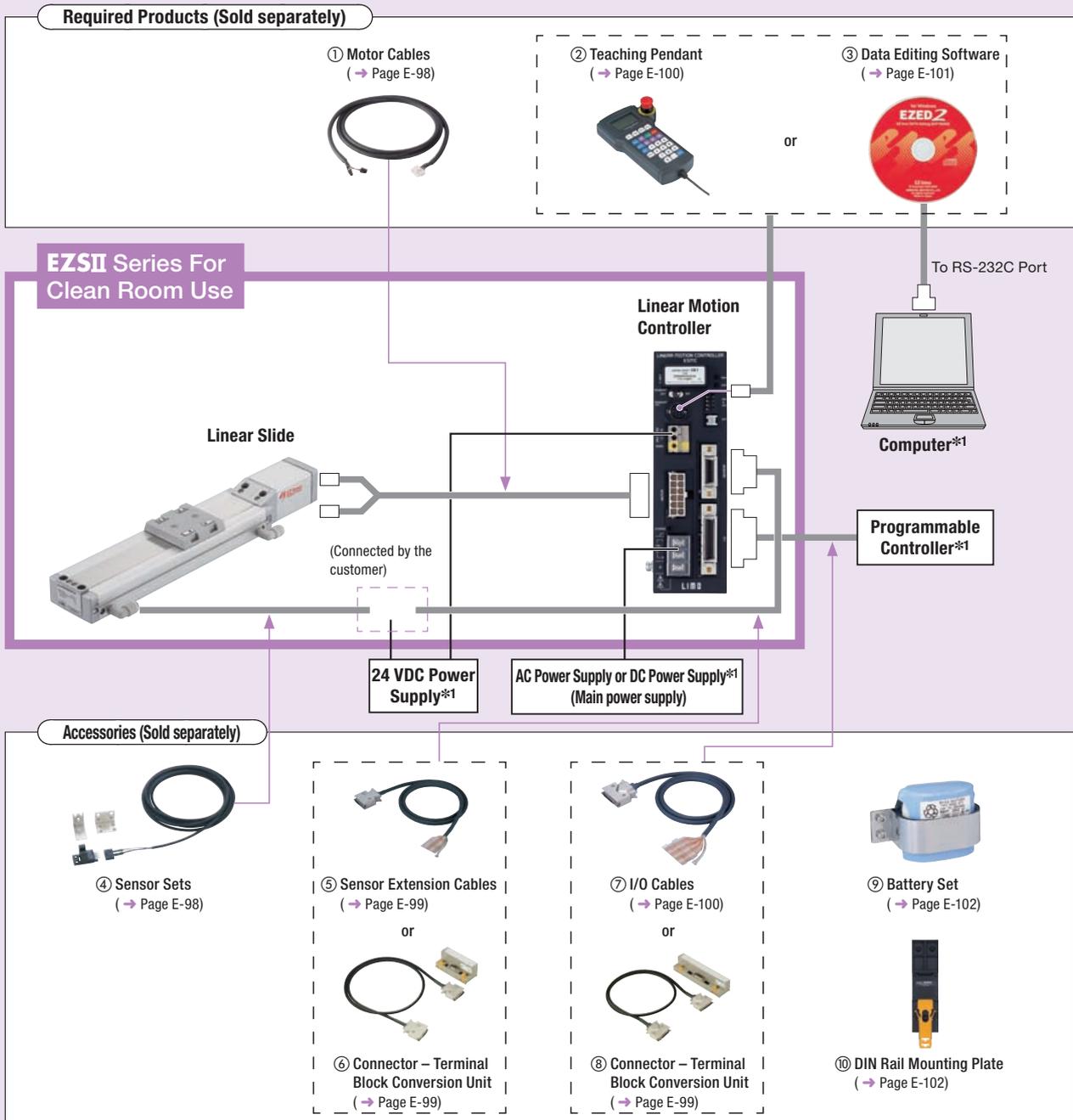
Note

● 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
EZS3D015C1-A	CC020ES-2	EZT1		CC36D1-1	CC20D2-1	PAES-S

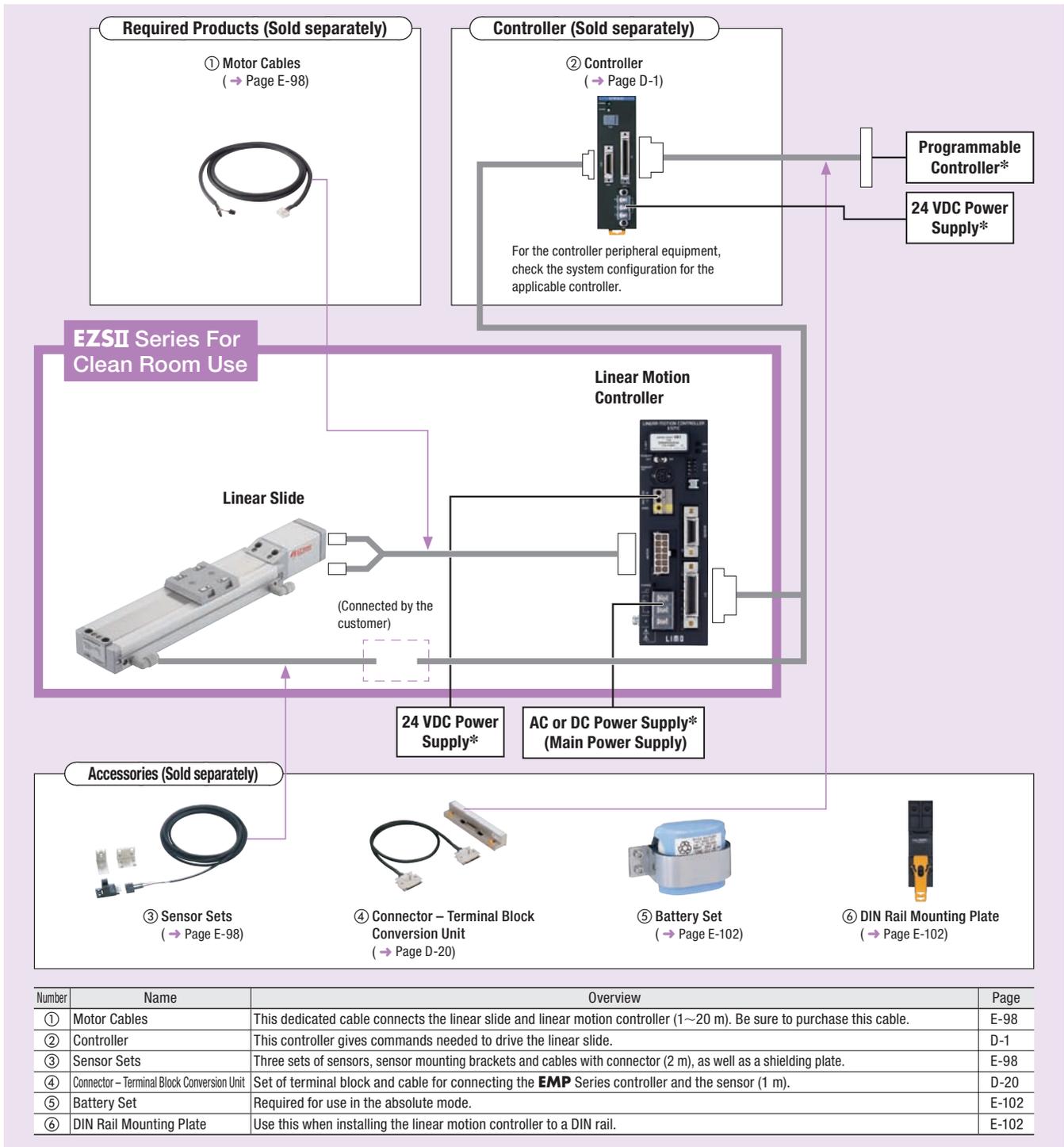
*2 Not required if a sensorless return-to-home operation is performed.

● 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	EZS: EZSII Series		
②	Linear Slide Size	3: Width 54 mm Height 50 mm	4: Width 74 mm Height 50 mm	6: Width 74 mm Height 66.5 mm
③	Lead	D: 12 mm E: 6 mm		
④	Stroke	005: 50 mm	010: 100 mm	015: 150 mm
		020: 200 mm	025: 250 mm	030: 300 mm
		035: 350 mm	040: 400 mm	045: 450 mm
		050: 500 mm	055: 550 mm	060: 600 mm
		065: 650 mm	070: 700 mm	075: 750 mm
		080: 800 mm	085: 850 mm	
⑤	For Clean Room Use			
⑥	Electromagnetic Brake	Blank: Without Electromagnetic Brake M: With Electromagnetic Brake		
⑦	Direction of Air Couplers for Suction	1: Right 2: Left		
⑧	Power Supply Voltage	K: 24 VDC A: Single-Phase 100-115 VAC C: 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	EZS6□005C□-K	EZS6□005C□-A	EZS6□005C□-C	EZS6□005CM□-K	EZS6□005CM□-A	EZS6□005CM□-C
100 mm	EZS6□010C□-K	EZS6□010C□-A	EZS6□010C□-C	EZS6□010CM□-K	EZS6□010CM□-A	EZS6□010CM□-C
150 mm	EZS6□015C□-K	EZS6□015C□-A	EZS6□015C□-C	EZS6□015CM□-K	EZS6□015CM□-A	EZS6□015CM□-C
200 mm	EZS6□020C□-K	EZS6□020C□-A	EZS6□020C□-C	EZS6□020CM□-K	EZS6□020CM□-A	EZS6□020CM□-C
250 mm	EZS6□025C□-K	EZS6□025C□-A	EZS6□025C□-C	EZS6□025CM□-K	EZS6□025CM□-A	EZS6□025CM□-C
300 mm	EZS6□030C□-K	EZS6□030C□-A	EZS6□030C□-C	EZS6□030CM□-K	EZS6□030CM□-A	EZS6□030CM□-C
350 mm	EZS6□035C□-K	EZS6□035C□-A	EZS6□035C□-C	EZS6□035CM□-K	EZS6□035CM□-A	EZS6□035CM□-C
400 mm	EZS6□040C□-K	EZS6□040C□-A	EZS6□040C□-C	EZS6□040CM□-K	EZS6□040CM□-A	EZS6□040CM□-C
450 mm	EZS6□045C□-K	EZS6□045C□-A	EZS6□045C□-C	EZS6□045CM□-K	EZS6□045CM□-A	EZS6□045CM□-C
500 mm	EZS6□050C□-K	EZS6□050C□-A	EZS6□050C□-C	EZS6□050CM□-K	EZS6□050CM□-A	EZS6□050CM□-C
550 mm	EZS6□055C□-K	EZS6□055C□-A	EZS6□055C□-C	EZS6□055CM□-K	EZS6□055CM□-A	EZS6□055CM□-C
600 mm	EZS6□060C□-K	EZS6□060C□-A	EZS6□060C□-C	EZS6□060CM□-K	EZS6□060CM□-A	EZS6□060CM□-C
650 mm	EZS6□065C□-K	EZS6□065C□-A	EZS6□065C□-C	EZS6□065CM□-K	EZS6□065CM□-A	EZS6□065CM□-C
700 mm	EZS6□070C□-K	EZS6□070C□-A	EZS6□070C□-C	EZS6□070CM□-K	EZS6□070CM□-A	EZS6□070CM□-C
750 mm	EZS6□075C□-K	EZS6□075C□-A	EZS6□075C□-C	EZS6□075CM□-K	EZS6□075CM□-A	EZS6□075CM□-C
800 mm	EZS6□080C□-K	EZS6□080C□-A	EZS6□080C□-C	EZS6□080CM□-K	EZS6□080CM□-A	EZS6□080CM□-C
850 mm	EZS6□085C□-K	EZS6□085C□-A	EZS6□085C□-C	EZS6□085CM□-K	EZS6□085CM□-A	EZS6□085CM□-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.

— 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	EZS: EZSII Series	
②	Linear Slide Size	3: Width 54 mm Height 50 mm	4: Width 74 mm Height 50 mm 6: Width 74 mm Height 66.5 mm
③	Lead	D: 12 mm E: 6 mm	
④	Stroke	006~009: 60~90 mm 016~019: 160~190 mm 026~029: 260~290 mm 036~039: 360~390 mm 046~049: 460~490 mm 056~059: 560~590 mm 066~069: 660~690 mm 076~079: 760~790 mm	011~014: 110~140 mm 021~024: 210~240 mm 031~034: 310~340 mm 041~044: 410~440mm 051~054: 510~540 mm 061~064: 610~640 mm 071~074: 710~740 mm 081~084: 810~840 mm
⑤	For Clean Room Use		
⑥	Electromagnetic Brake	Blank: Without Electromagnetic Brake M: With Electromagnetic Brake	
⑦	Direction of Air Couplers for Suction	1: Right 2: Left	
⑧	Power Supply Voltage	K: 24 VDC A: Single-Phase 100-115 VAC C: Single-Phase 200-230 VAC	

Product Line

10 mm increments 

EZS3

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

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

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

- 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"> • 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: <ul style="list-style-type: none"> • Motor Case – Excitation and Sensor Windings 0.5 kVAC 50 Hz • Motor Case – Electromagnetic Brake Windings (Only for electromagnetic brake type) 0.5 kVAC 50 Hz
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"> • 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: <ul style="list-style-type: none"> • Motor Case – Excitation and Sensor Windings EZS3-EZS4: 1.0 kVAC 50 Hz EZS6: 1.5 kVAC 50 Hz • Motor Case – Electromagnetic Brake Windings (Only for electromagnetic brake type) 1.0 kVAC 50 Hz
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 _r : 4.2 M _v : 4.2 M _a : 10.5
								Static Permissible Moment [N·m]	M _r : 26.4 M _v : 26.4 M _a : 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
EZS3D□C□-K	12	~7.5	—	~43	—	600	550	460	400
EZS3D□CM□-K			~3.5		43				
EZS3E□C□-K	6	~15	—	~86	—	300	270	220	200
EZS3E□CM□-K			~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 EZS: EZSII Series
②	Linear Slide Size 3 : Width 54 mm Height 50 mm
③	Lead D : 12 mm E : 6 mm
④	Stroke 005 (50 mm)~ 070 (700 mm)
⑤	For Clean Room Use
⑥	Electromagnetic Brake Blank: Without Electromagnetic Brake M : With Electromagnetic Brake
⑦	Direction of Air Couplers for Suction 1 : Right 2 : Left
⑧	Power Supply Voltage K : 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	EZS3D □C□-K	EZSM3D□C□K	ESMC-K2
	EZS3E □C□-K	EZSM3E□C□K	
Equipped	EZS3D □CM□-K	EZSM3D□CM□K	
	EZS3E □CM□-K	EZSM3E□CM□K	

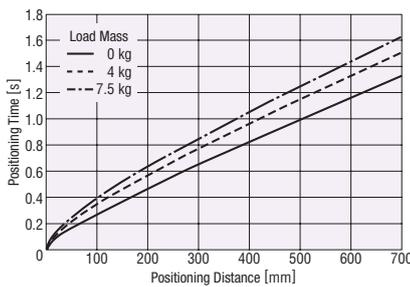
- A number indicating the stroke length is entered where the box □ is located within the product name.
- A number **1** (right) or **2** (left) indicating the direction of the air couplers for suction is entered where the box □ is located within the product name.

Positioning Distance – Positioning Time

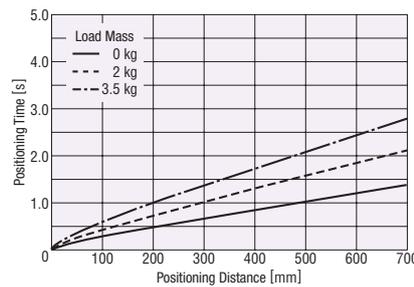
The positioning time (reference) can be checked from the positioning distance. A reference value for the positioning time can be calculated by multiplying the positioning time calculated from the graph with the positioning time coefficient for the applicable stroke. Refer to page G-19 for operating speed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

EZS3D (12 mm lead)

◇ Horizontal Direction Installation



◇ Vertical Direction Installation

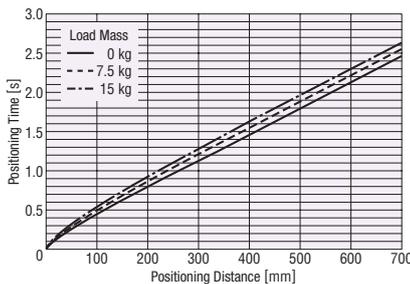


Positioning Time Coefficient

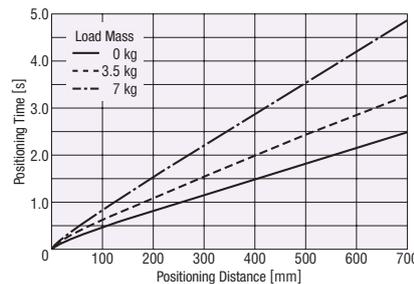
Stroke [mm]	Load Mass					
	Horizontal Direction Installation			Vertical Direction Installation		
	0 kg	4 kg	7.5 kg	0 kg	2 kg	3.5 kg
50~550	1.0	1.0	1.0	1.0	1.0	1.0
560~600	1.0	1.0	1.0	1.0	1.0	1.0
610~650	1.2	1.1	1.1	1.2	1.0	1.0
660~700	1.4	1.2	1.2	1.3	1.0	1.0

EZS3E (6 mm lead)

◇ Horizontal Direction Installation



◇ Vertical Direction Installation



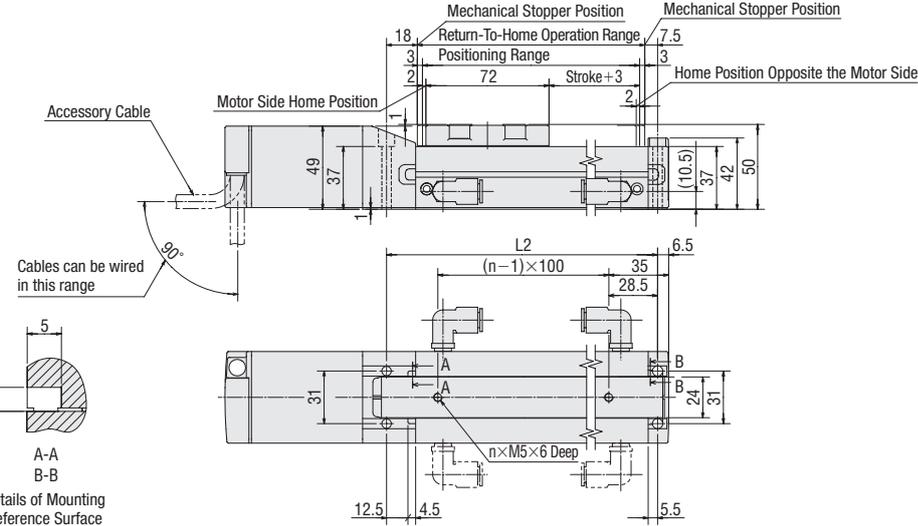
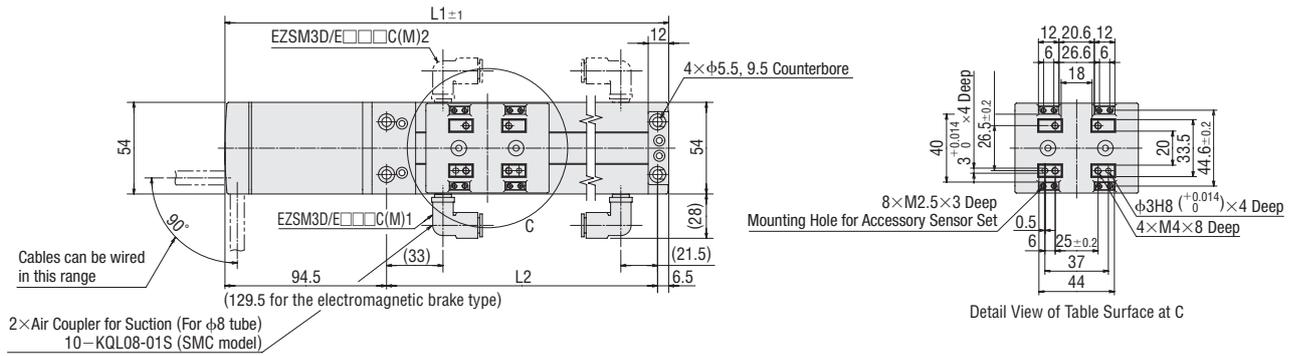
Positioning Time Coefficient

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)



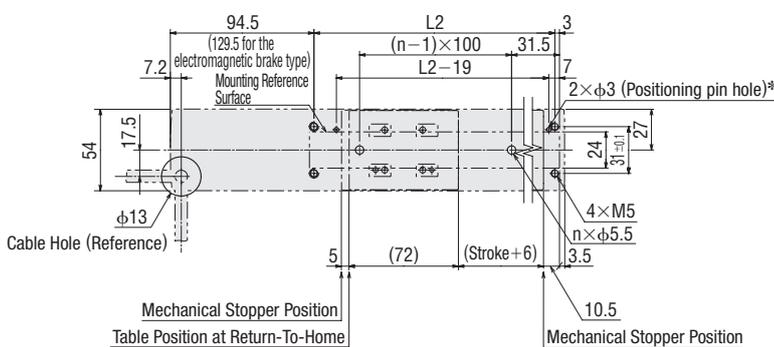
Number of Holes (n)

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 _x : 4.2 M _y : 4.2 M _z : 10.5
								Static Permissible Moment [N·m]	M _x : 26.4 M _y : 26.4 M _z : 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 EZS: EZSII Series
②	Linear Slide Size 3 : Width 54 mm Height 50 mm
③	Lead D : 12 mm E : 6 mm
④	Stroke 005 (50 mm)~ 070 (700 mm)
⑤	For Clean Room Use
⑥	Electromagnetic Brake Blank: Without Electromagnetic Brake M : With Electromagnetic Brake
⑦	Direction of Air Couplers for Suction 1 : Right 2 : Left
⑧	Power Supply Voltage A : Single-Phase 100-115 VAC C : 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	EZS3D □C□- A	EZSM3D□C□A	ESMC-A2
	EZS3D □C□- C	EZSM3D□C□C	ESMC-C2
	EZS3E □C□- A	EZSM3E□C□A	ESMC-A2
	EZS3E □C□- C	EZSM3E□C□C	ESMC-C2
Equipped	EZS3D □CM□- A	EZSM3D□CM□A	ESMC-A2
	EZS3D □CM□- C	EZSM3D□CM□C	ESMC-C2
	EZS3E □CM□- A	EZSM3E□CM□A	ESMC-A2
	EZS3E □CM□- C	EZSM3E□CM□C	ESMC-C2

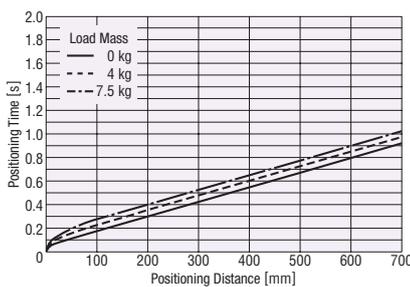
- A number indicating the stroke length is entered where the box □ is located within the product name.
- A number **1** (right) or **2** (left) indicating the direction of the air couplers for suction is entered where the box □ is located within the product name.

Positioning Distance – Positioning Time

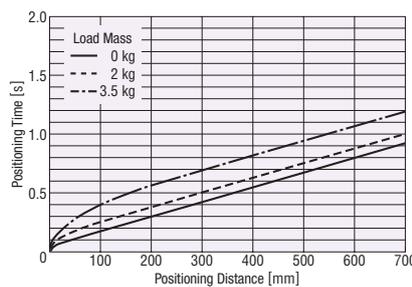
The positioning time (reference) can be checked from the positioning distance. A reference value for the positioning time can be calculated by multiplying the positioning time calculated from the graph with the positioning time coefficient for the applicable stroke. Refer to page G-19 for operating speed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

● EZS3D (12 mm lead)

◇ Horizontal Direction Installation



◇ Vertical Direction Installation

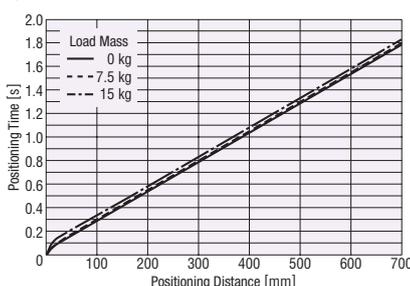


Positioning Time Coefficient

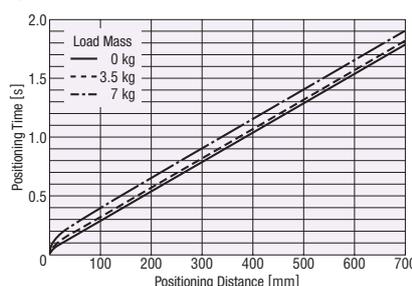
Stroke [mm]	Load Mass					
	Horizontal Direction Installation			Vertical Direction Installation		
	0 kg	4 kg	7.5 kg	0 kg	2 kg	3.5 kg
50~500	1.0	1.0	1.0	1.0	1.0	1.0
510~550	1.2	1.2	1.2	1.2	1.2	1.1
560~600	1.4	1.4	1.3	1.4	1.3	1.2
610~650	1.7	1.6	1.6	1.7	1.6	1.4
660~700	1.9	1.8	1.8	1.9	1.8	1.6

● EZS3E (6 mm lead)

◇ Horizontal Direction Installation



◇ Vertical Direction Installation



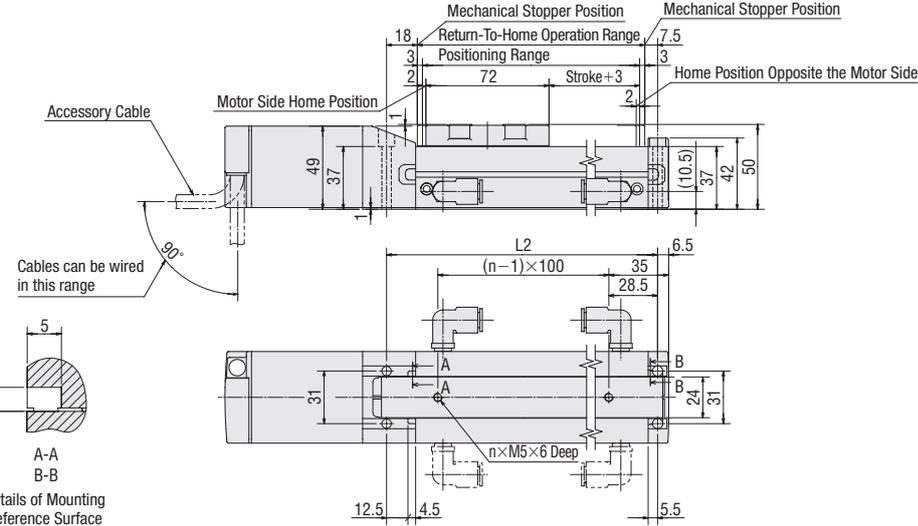
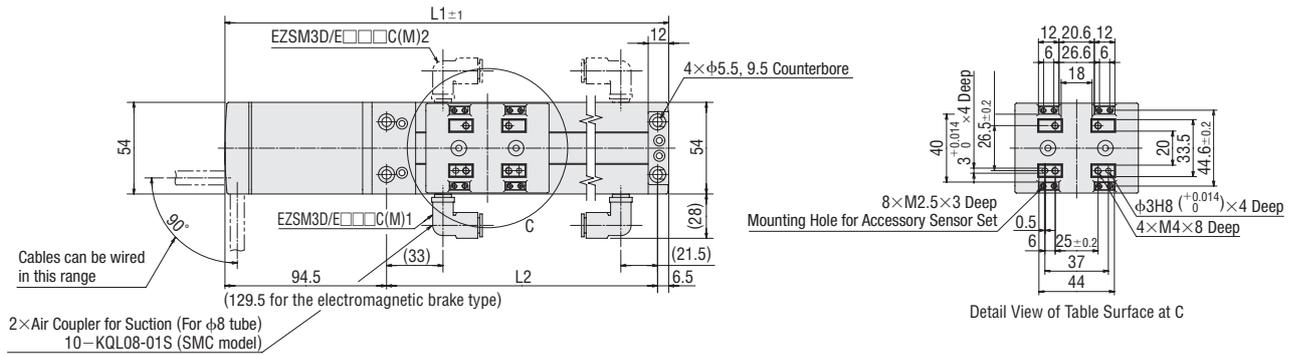
Positioning Time Coefficient

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)



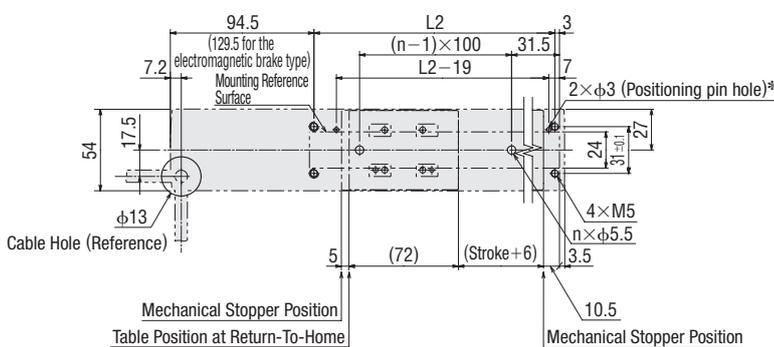
Number of Holes (n)

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.