

Motorized Cylinders EZ limo EZA Series

For details on this product please refer to our website, contact technical support or your nearest Oriental Motor sales office.
www.orientalmotor.com

These motorized cylinders have a built-in LM guide. Greater ease of use and improved performance are realized with a compact body. These motorized cylinders do not require any external guide mechanism.



● For detailed product safety standard information including standards, file number and certification body, please visit www.orientalmotor.com.



Features



EZA4D015-A Stroke: 150 mm

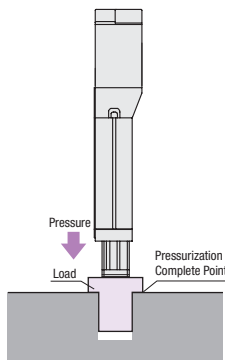
High Power

High Thrust Force

These models are ideal for applications where the load is pushed (pressured) directly or with a pressure jig such as a die set used on a press machine.

EZA6 (6 mm lead)

- Maximum Thrust Force: **400 N**
- Maximum Pushing Force (Pressure): **500 N**
(Able to push continuously)



Large Transportable Mass

The load can be transported directly without using an external guide.

EZA6 (6 mm lead)

- Maximum Transportable Mass: Horizontal Transport **9 kg***
Vertical Transport **30 kg**

*The maximum horizontal transportable mass varies depending on the applicable moment.
*In a horizontal transport application, up to 60 kg of mass can be transported by providing an external guide mechanism such as a guide.



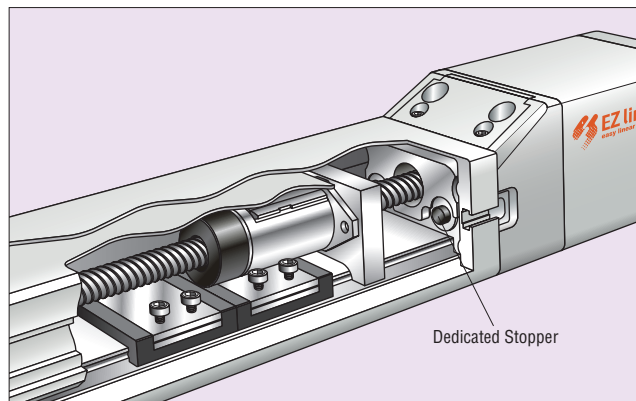
High Speed

High-Speed Operation

High-speed positioning operation is possible.

EZA4, EZA6 (12 mm lead)

- Maximum Speed: **600** mm/s
 - Sensorless Return-To-Home Speed: **100** mm/s
- We have developed a dedicated stopper to achieve the sensorless return-to-home operation at a maximum speed of 100 mm/s.



Space-Saving

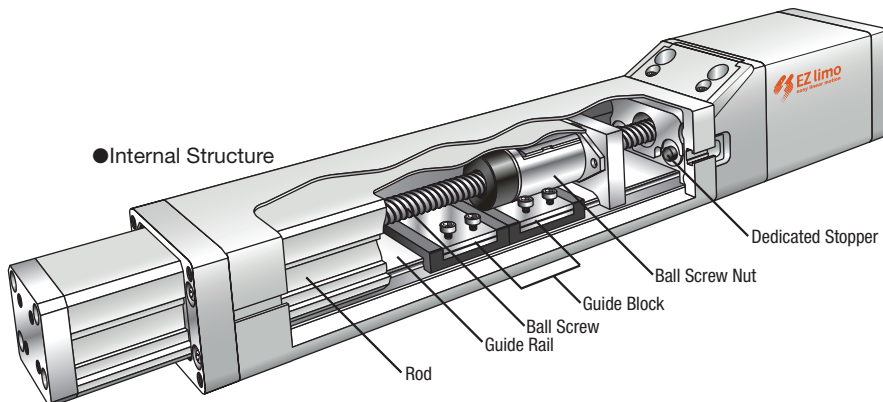
Space Saving

With a revision of the motor cable output shape, there is no longer dead space. The overall length has become shorter for each stroke, thereby saving the equipment space.

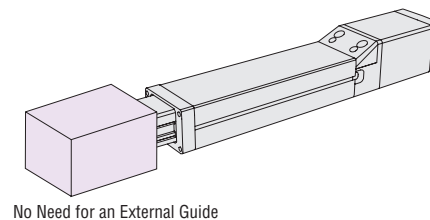
$$\text{Stroke} + 280.5 \text{ mm} = \text{Overall Length of Cylinder}$$

Built-In LM Guide

The LM guide is housed in the motorized cylinder body for smaller size and greater ease of use.



- **No Need for an External Guide**
No external guide mechanism is required and the load can be transported or pushed (pressed) directly.



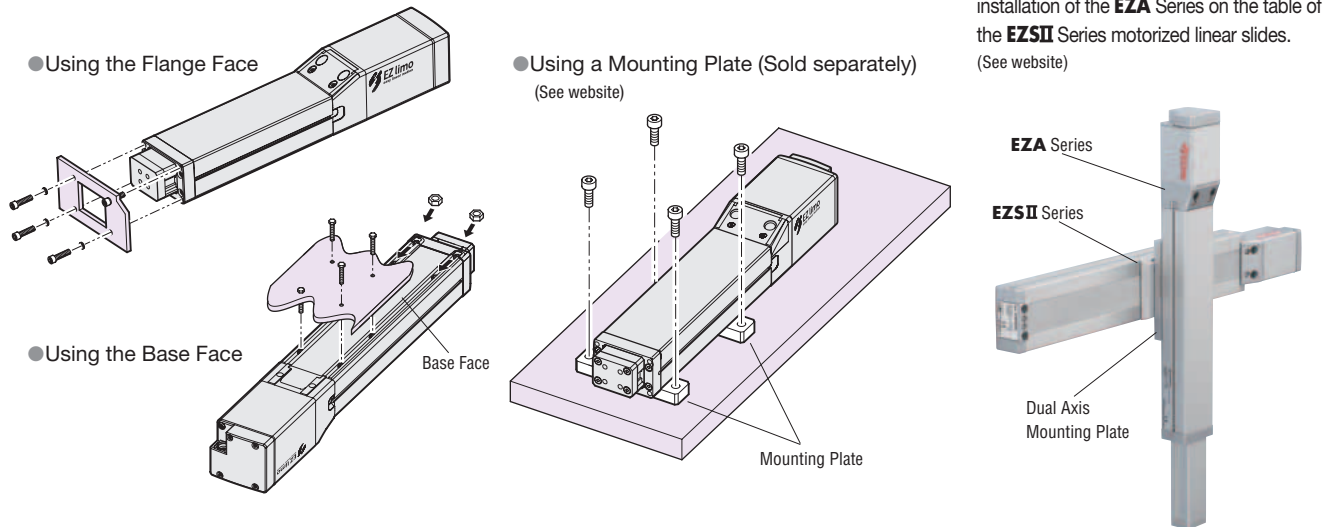
The ball screw and LM guide have been lubricated with AFF grease with reduced dust-raising properties used in clean rooms.

- Introduction
- Motorized Linear Slides
 - EZ limo EZST
 - EZ limo SPV
- Motorized Cylinders
 - EZ limo EZCI
 - EZ limo EZA
 - EZ limo PWAIT
- Motorized Linear Slides/Cylinders
 - Common Controller
 - Accessories
- Compact Linear Actuators
 - DRL
- Hollow Rotary Actuators
 - DG
 - Accessories

Easy to Install

Flexible Mounting

You can choose either the flange face or base face for installation, and mounting plates for 2-axis configuration, etc., are also available as accessories.

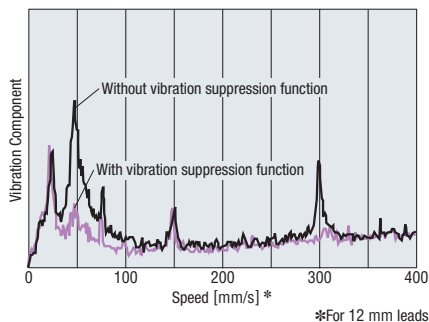


*For accessory details on these products please either refer to our website or contact technical support or your nearest Oriental Motor sales office.
www.orientalmotor.com

Easy to Use

Vibration Suppression Function

The newly developed control method achieves low vibration even at the speed range where large vibration occurs normally.



Easy Stroke Selection

● Stroke: 50~300 mm

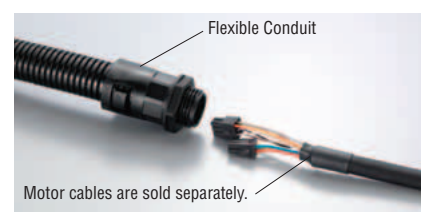
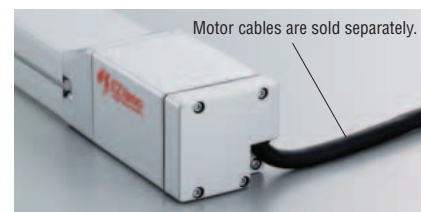
Products are available with strokes set in 50 mm increments

Easy Wiring with Just One Cable

The cylinder 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.

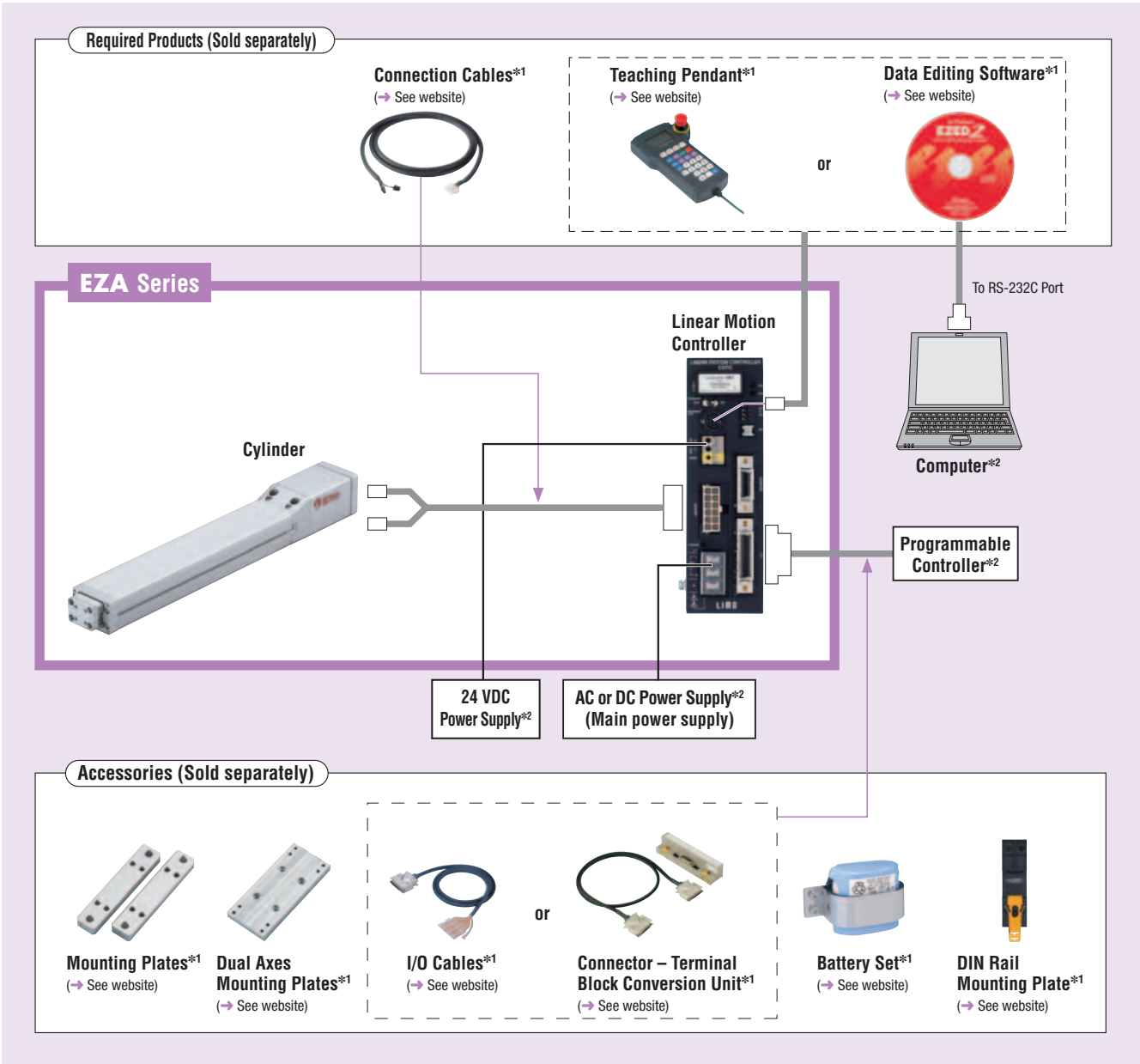
*Maximum of 10 m if the input is 24 VDC.



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

System Configuration

Controller Mode



Example of System Configuration

EZA Series	Sold Separately		+	Sold Separately	
	Connection Cable (2 m)	Teaching Pendant		Mounting Plate	I/O Cable (1 m)
EZA4E005-A	CC020ES-2	EZT1		PTP-4A	CC36D1-1

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

*1 For accessory details on these products please either refer to our website, contact technical support or your nearest Oriental Motor sales office. www.orientalmotor.com

*2 Not supplied

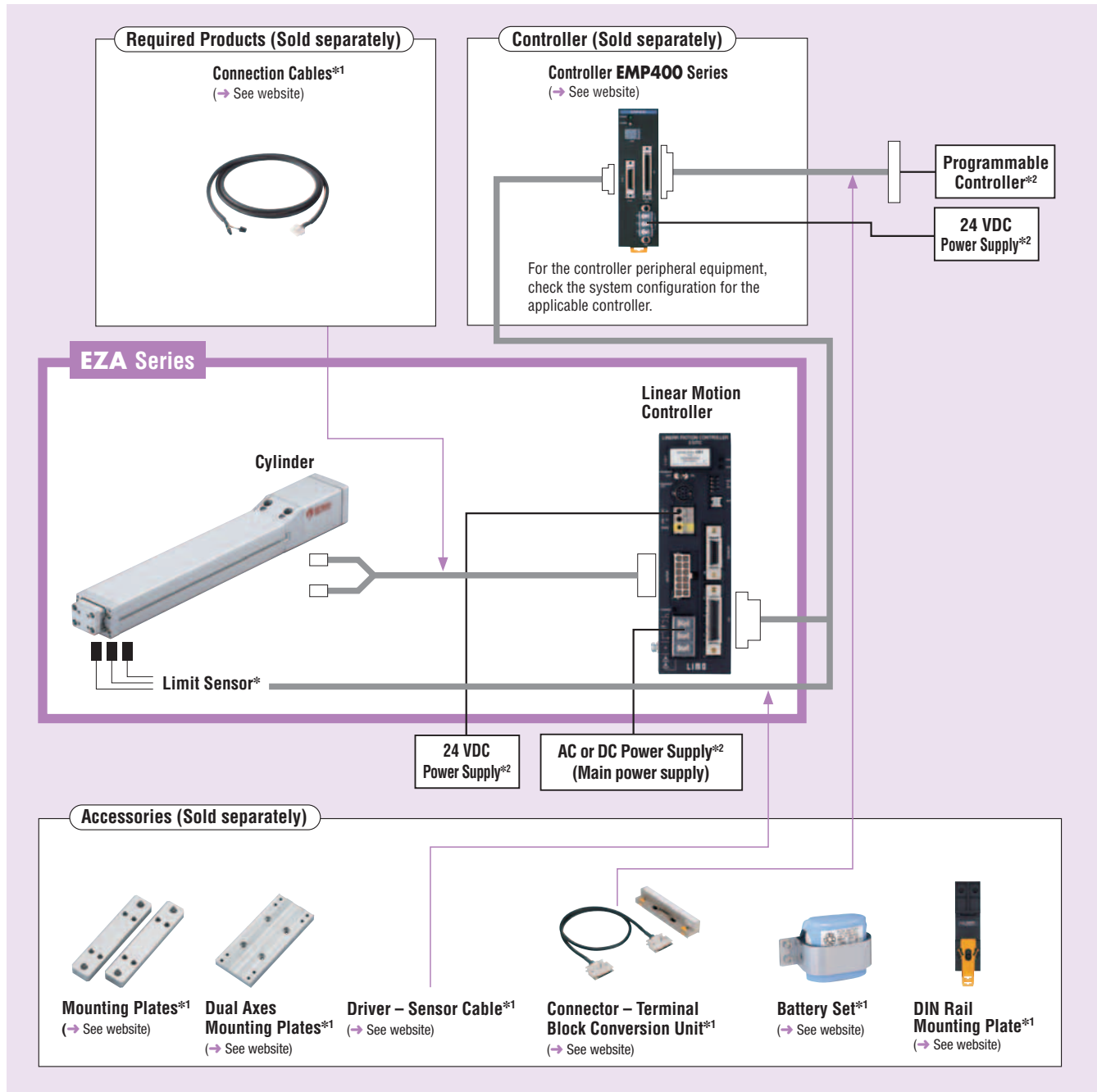
- Introduction
- Motorized Linear Slides
 - EZLimo EZST
 - EZLimo SPV
- Motorized Cylinders
 - EZLimo EZCI
 - EZLimo EZA
 - EZLimo PVAIT
- Motorized Linear Slides/Cylinders
 - Common Controller
 - Accessories
- Compact Linear Actuators
 - DRL
- Hollow Rotary Actuators
 - Accessories

● Driver Mode

Below is an example of a single-axis system configuration with the **EMP400** Series controller.

When performing a return to home operation using the linear motion controller, refer to the system configuration on page E-73.

A teaching pendant or data editing software is required to change the parameters (I/O logic, speed filter, etc.) of the linear motion controller.



● Example of System Configuration

EZA Series	Sold Separately	
	Connection Cable (2 m)	
EZA4E005-A	CC020ES-2	

+

Sold Separately		
Controller	Driver – Sensor Cable (0.5 m)	Connector – Terminal Block Conversion Unit (1 m)
EMP401-1	CC005EZ6-EMPD	CC50T1

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

*1 For accessory details on these products please either refer to our website, contact technical support or your nearest Oriental Motor sales office. www.orientalmotor.com

*2 Not supplied

EZA4: Frame Size 54 mm × 38 mm 24 VDC

Maximum Transportable Mass: Horizontal 30 kg/Vertical 14 kg
Stroke: 50 to 300 mm (in 50 mm increments)



Introduction
Motorized Linear Slides
EZLimo
EZSIT
EZLimo
SPV
EZLimo
EZCII
EZLimo
EZA
EZLimo
PWAII
Motorized Cylinders
EZLimo
PWAIT
Motorized Linear Slides/Cylinders
Common
Controller
Accessories
Compact Linear
Actuators
DRL
Hollow Rotary Actuators
DG
Accessories

Specifications of Cylinder (RoHS)

Drive Method	Ball Screw	Repetitive Positioning Accuracy [mm]	±0.02	Resolution [mm]	0.01	Dynamic Permissible Moment [N·m]	Mp: 7.5 Mr: 7.5 Mh: 2.6
Model	Lead [mm]	Transportable Mass [kg] ^{*1}		Thrust [N]	Push Force [N] ^{*2}	Holding Force [N] ^{*3}	Maximum Speed [mm/s]
EZA4D□-K	12	~15	-	~70	100	70	600
EZA4D□M-K			~6.5				
EZA4E□-K	6	~30	-	~140	200	140	300
EZA4E□M-K			~14				

- Enter the stroke length in the box (□) within the model name.
- *1 The value when an external guide is used. Moment calculations are required when transferring a load directly.
- *2 Maximum speed of push-motion operation is 25 mm/s.
- *3 The holding force of the electromagnetic brake is the same value as the holding force.

Product Number Code

EZA 4 D 030 M - K

①	②	③	④	⑤	⑥
① Series	EZA: EZA Series				
② Cylinder Size	4: Frame Size 54 mm × 38 mm				
③ Lead	D: 12 mm E: 6 mm				
④ Stroke	005 (50 mm) ~ 030 (300 mm)				
⑤ Electromagnetic Brake	Blank: Without Electromagnetic Brake M: With Electromagnetic Brake				
⑥ Power Supply Voltage	K: 24 VDC				

Cylinder/Controller Combinations

Model names for cylinder and linear motion controller combinations are shown below.

Electromagnetic Brake	Model	Cylinder Model	Controller Model
Not equipped	EZA4D□-K	EZAM4D□K	ESMC-K2
	EZA4E□-K	EZAM4E□K	
Equipped	EZA4D□M-K	EZAM4D□MK	
	EZA4E□M-K	EZAM4E□MK	

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

For details (specifications, characteristics, dimensions and others) on these products please refer either to our website, contact technical support or your nearest Oriental Motor sales office.
www.orientalmotor.com

EZA4: Frame Size 54 mm × 38 mm

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

Maximum Transportable Mass: Horizontal 30 kg/Vertical 14 kg
Stroke: 50 to 300 mm (in 50 mm increments)



Specifications of Cylinder (RoHS)



Drive Method	Ball Screw	Repetitive Positioning Accuracy [mm]	±0.02	Resolution [mm]	0.01	Dynamic Permissible Moment [N·m]	Mr: 7.5 Mr: 7.5 Mr: 2.6
Model	Lead [mm]	Transportable Mass [kg]*1		Thrust [N]	Push Force [N]*2	Holding Force [N]*3	Maximum Speed [mm/s]
		Horizontal	Vertical				
EZA4D □-□	12	~15	-	~70	100	70	600
EZA4D □ M -□			~6.5				
EZA4E □-□	6	~30	-	~140	200	140	300
EZA4E □ M -□			~14				

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

Enter the power supply voltage **A** or **C** in the box (□) within the model name.

*1 The value when an external guide is used. Moment calculations are required when transferring a load directly.

*2 Maximum speed of push-motion operation is 25 mm/s.

*3 The holding force of the electromagnetic brake is the same value as the holding force.

Product Number Code

EZA 4 D 030 M - A

① ② ③ ④ ⑤ ⑥

① Series	EZA: EZA Series
② Cylinder Size	4: Frame Size 54 mm × 38 mm
③ Lead	D: 12 mm E: 6 mm
④ Stroke	005 (50 mm)~ 030 (300 mm)
⑤ Electromagnetic Brake	Blank: Without Electromagnetic Brake M: With Electromagnetic Brake
⑥ Power Supply Voltage	A: Single-Phase 100-115 VAC C: Single-Phase 200-230 VAC

Cylinder/Controller Combinations

Model names for cylinder and linear motion controller combinations are shown below.

Electromagnetic Brake	Model	Cylinder Model	Controller Model
Not equipped	EZA4D □- A	EZAM4D□A	ESMC-A2
	EZA4D □- C	EZAM4D□C	ESMC-C2
	EZA4E □- A	EZAM4E□A	ESMC-A2
	EZA4E □- C	EZAM4E□C	ESMC-C2
Equipped	EZA4D □ M - A	EZAM4D□MA	ESMC-A2
	EZA4D □ M - C	EZAM4D□MC	ESMC-C2
	EZA4E □ M - A	EZAM4E□MA	ESMC-A2
	EZA4E □ M - C	EZAM4E□MC	ESMC-C2

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

For details (specifications, characteristics, dimensions and others) on these products please refer either to our website, contact technical support or your nearest Oriental Motor sales office.
www.orientalmotor.com

EZA6: Frame Size 74 mm × 52.5 mm 24 VDC

Maximum Transportable Mass: Horizontal 60 kg/Vertical 30 kg
Stroke: 50 to 300 mm (in 50 mm increments)



Specifications of Cylinder RoHS

Drive Method	Ball Screw	Repetitive Positioning Accuracy [mm]	±0.02	Resolution [mm]	0.01	Dynamic Permissible Moment [N·m]	Mr: 13.0 Mr: 13.0 Mr: 6.2
Model	Lead [mm]	Transportable Mass [kg] ^{*1}		Thrust [N]	Push Force [N] ^{*2}	Holding Force [N] ^{*3}	Maximum Speed [mm/s]
		Horizontal	Vertical				
EZA6D □-K	12	~30	—	~200	400	200	600
EZA6D □M-K			~15				
EZA6E □-K	6	~60	—	~400	500	400	300
EZA6E □M-K			~30				

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

*1 The value when an external guide is used. Moment calculations are required when transferring a load directly.

*2 Maximum speed of push-motion operation is 25 mm/s.

*3 The holding force of the electromagnetic brake is the same value as the holding force.

Product Number Code

EZA 6 D 030 M - K

① ② ③ ④ ⑤ ⑥

① Series	EZA : EZA Series
② Cylinder Size	6 : Frame Size 74 mm × 52.5 mm
③ Lead	D : 12 mm E : 6 mm
④ Stroke	005 (50 mm)~ 030 (300 mm)
⑤ Electromagnetic Brake	Blank: Without Electromagnetic Brake M : With Electromagnetic Brake
⑥ Power Supply Voltage	K : 24 VDC

For details (specifications, characteristics, dimensions and others) on these products please refer either to our website, contact technical support or your nearest Oriental Motor sales office.
www.orientalmotor.com

Cylinder/Controller Combinations

Model names for cylinder and linear motion controller combinations are shown below.

Electromagnetic Brake	Model	Cylinder Model	Controller Model
Not equipped	EZA6D □-K	EZAM6D□K	ESMC-K2
	EZA6E □-K	EZAM6E□K	
Equipped	EZA6D □M-K	EZAM6D□MK	
	EZA6E □M-K	EZAM6E□MK	

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

EZA6: Frame Size 74 mm × 52.5 mm

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

Maximum Transportable Mass: Horizontal 60 kg/Vertical 30 kg
Stroke: 50 to 300 mm (in 50 mm increments)



Specifications of Cylinder (RoHS)



Drive Method	Ball Screw	Repetitive Positioning Accuracy [mm]	±0.02	Resolution [mm]	0.01	Dynamic Permissible Moment [N·m]	Mr: 13.0 Mr: 13.0 Mr: 6.2
Model	Lead [mm]	Transportable Mass [kg]*1		Thrust [N]	Push Force [N]*2	Holding Force [N]*3	Maximum Speed [mm/s]
EZA6D□-□	12	~30	—	~200	400	200	600
EZA6D□M-□			~15				
EZA6E□-□	6	~60	—	~400	500	400	300
EZA6E□M-□			~30				

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

Enter the power supply voltage **A** or **C** in the box (□) within the model name.

*1 The value when an external guide is used. Moment calculations are required when transferring a load directly.

*2 Maximum speed of push-motion operation is 25 mm/s.

*3 The holding force of the electromagnetic brake is the same value as the holding force.

Product Number Code

EZA 6 D 030 M - A

① ② ③ ④ ⑤ ⑥

① Series	EZA: EZA Series
② Cylinder Size	6: Frame Size 74 mm × 52.5 mm
③ Lead	D: 12 mm E: 6 mm
④ Stroke	005 (50 mm)~ 030 (300 mm)
⑤ Electromagnetic Brake	Blank: Without Electromagnetic Brake M: With Electromagnetic Brake
⑥ Power Supply Voltage	A: Single-Phase 100-115 VAC C: Single-Phase 200-230 VAC

Cylinder/Controller Combinations

Model names for cylinder and linear motion controller combinations are shown below.

Electromagnetic Brake	Model	Cylinder Model	Controller Model
Not equipped	EZA6D□-A	EZAM6D□A	ESMC-A2
	EZA6D□-C	EZAM6D□C	ESMC-C2
	EZA6E□-A	EZAM6E□A	ESMC-A2
	EZA6E□-C	EZAM6E□C	ESMC-C2
Equipped	EZA6D□M-A	EZAM6D□MA	ESMC-A2
	EZA6D□M-C	EZAM6D□MC	ESMC-C2
	EZA6E□M-A	EZAM6E□MA	ESMC-A2
	EZA6E□M-C	EZAM6E□MC	ESMC-C2

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

For details (specifications, characteristics, dimensions and others) on these products please refer either to our website, contact technical support or your nearest Oriental Motor sales office.
www.orientalmotor.com

Introduction	Motorized Linear Slides
EZlimo EZSI	EZlimo SPV
EZlimo EZCI	EZlimo EZA
EZlimo EZA	EZlimo PWAI
Motorized Linear Slides/Cylinders	Common Controller
Accessories	Compact Linear Actuators
DRL	Hollow Rotary Actuators
DG	Accessories