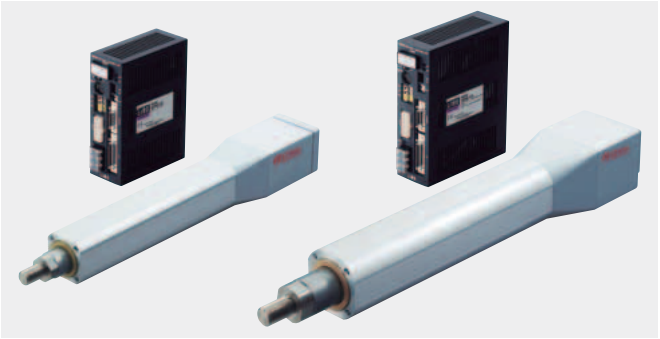
EZ limo EZCII Series

●Additional Information●
Technical reference ➜ Page G-1
Safety standards ➜ Page H-2

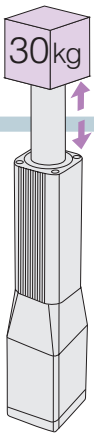
The structure of this motorized cylinder has been optimized to achieve greater convenience and performance in positioning applications. The compact design facilitates simpler installation and wiring to your system.

CE RoHS

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



Large Transportable Mass

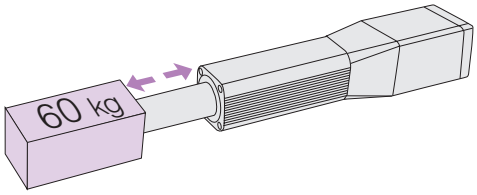


The **EZCII** Series can perform positioning of loads with a large transportable mass.

EZC6 (Lead 6 mm)

●Maximum Transportable Mass*: Horizontal **60** kg
Vertical **30** kg

*The value when an external guide is used.



●Maximum Thrust Force: **400** N

●Maximum Push Force: **500** N

High Speed

The **EZCII** Series can perform positioning at high speed.

EZC4 / **EZC6** (Lead 12 mm)

●Maximum Speed: **600** mm/s

●Sensorless Return to Home at Speed of **100** mm/s

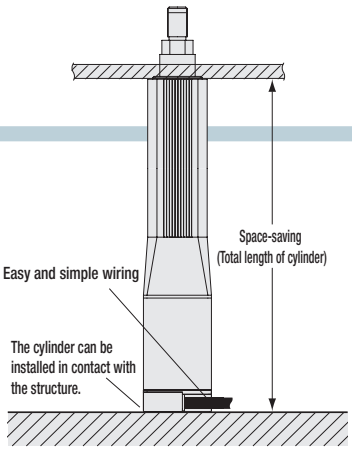
We have developed a dedicated stop buffer to achieve sensorless return to home operation at a maximum speed of 100 mm/s.

Space-Saving

The shape of the motor cable outlet was changed to eliminate dead space.
The total length of cylinder is shorter for every stroke or model, which enables space-saving design of your equipment.

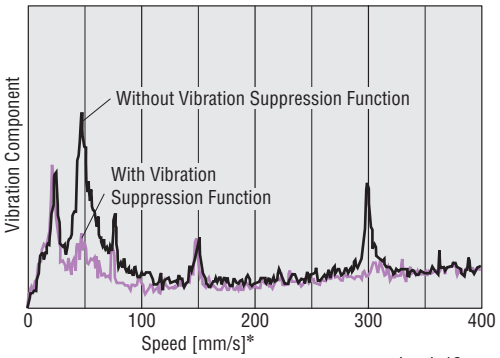
Stroke + 185 mm = Total length of cylinder

Since the space outside the cylinder's operating range is minimized, the overall system size can be reduced.



Vibration Suppression Function

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



*Lead: 12 mm

Lightweight Rod

Use of an aluminum rod reduced the weight by 25%* compared to a conventional model.

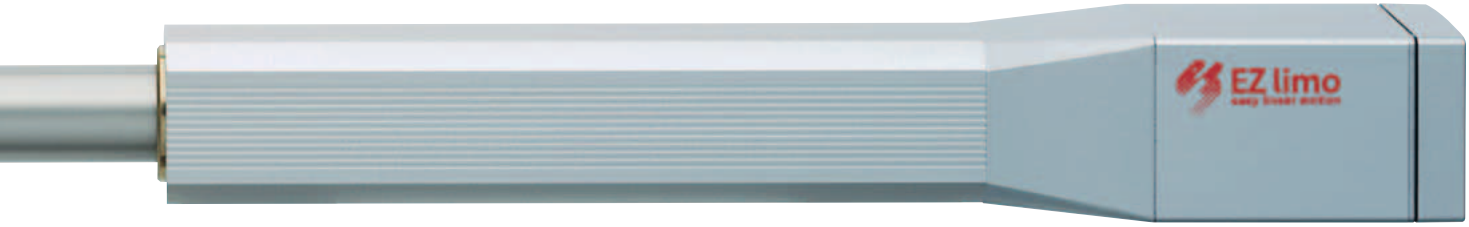
*EZC6: Stroke 300 mm

Maintenance-Free for Long-Term Performance

The ball screw employs the QZ™ lubrication system*.

*QZ™ lubrication system: High-density fiber net supplies appropriate amounts of oil, thereby preventing oil wastage and reducing environmental burden.

● QZ are registered trademarks of THK Co., Ltd.

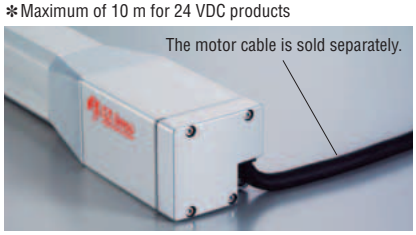


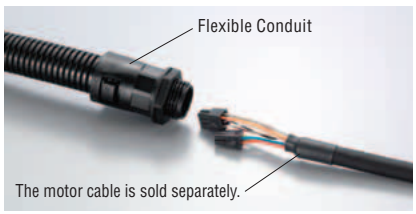
EZC4D015-A Stroke 150 mm

Easy Wiring

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 for 24 VDC products

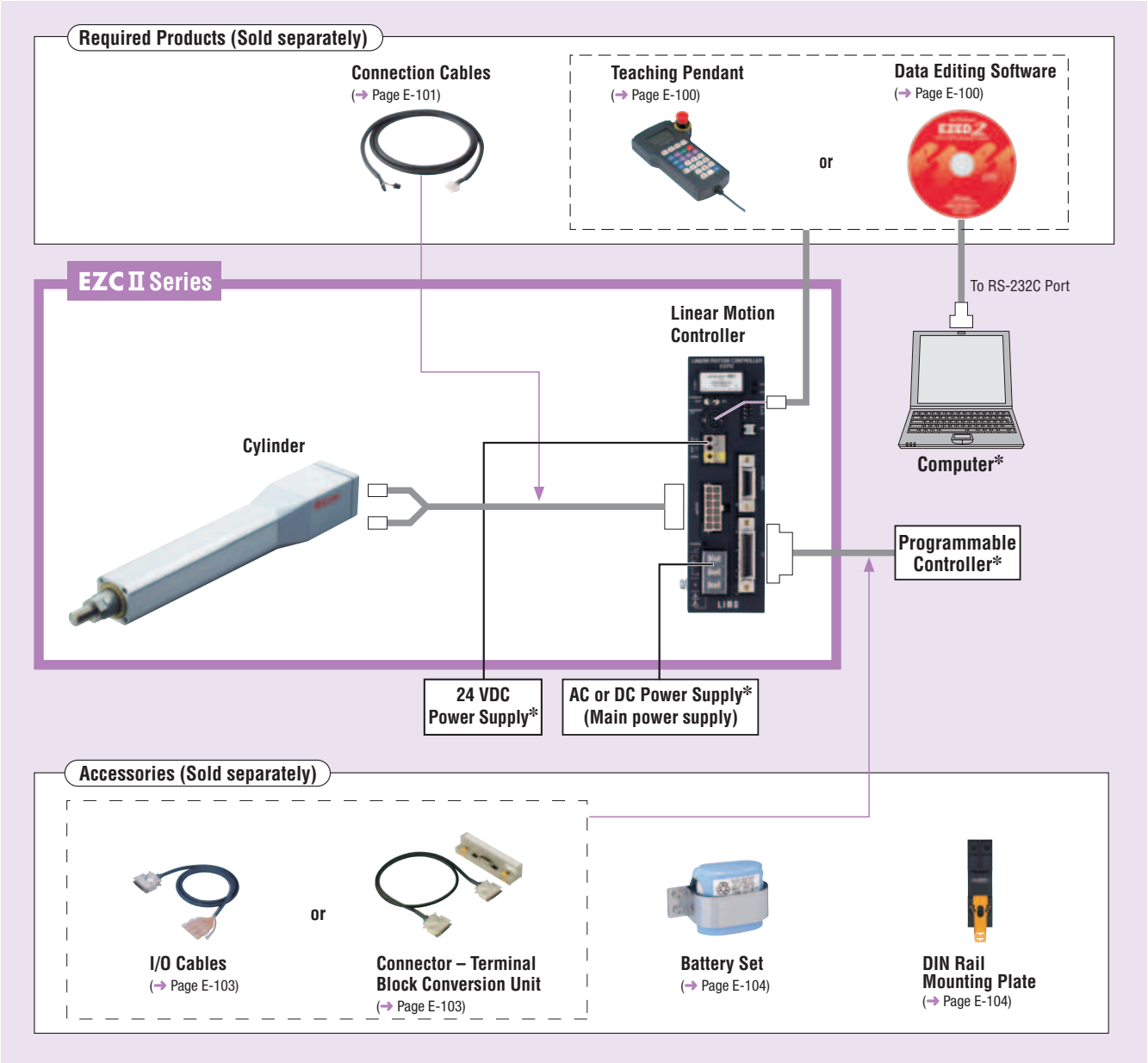




The cable can be placed in a flexible conduit or cable gland with an inner diameter of ϕ16.5 mm.

System Configuration

Controller Mode



Example of System Configuration

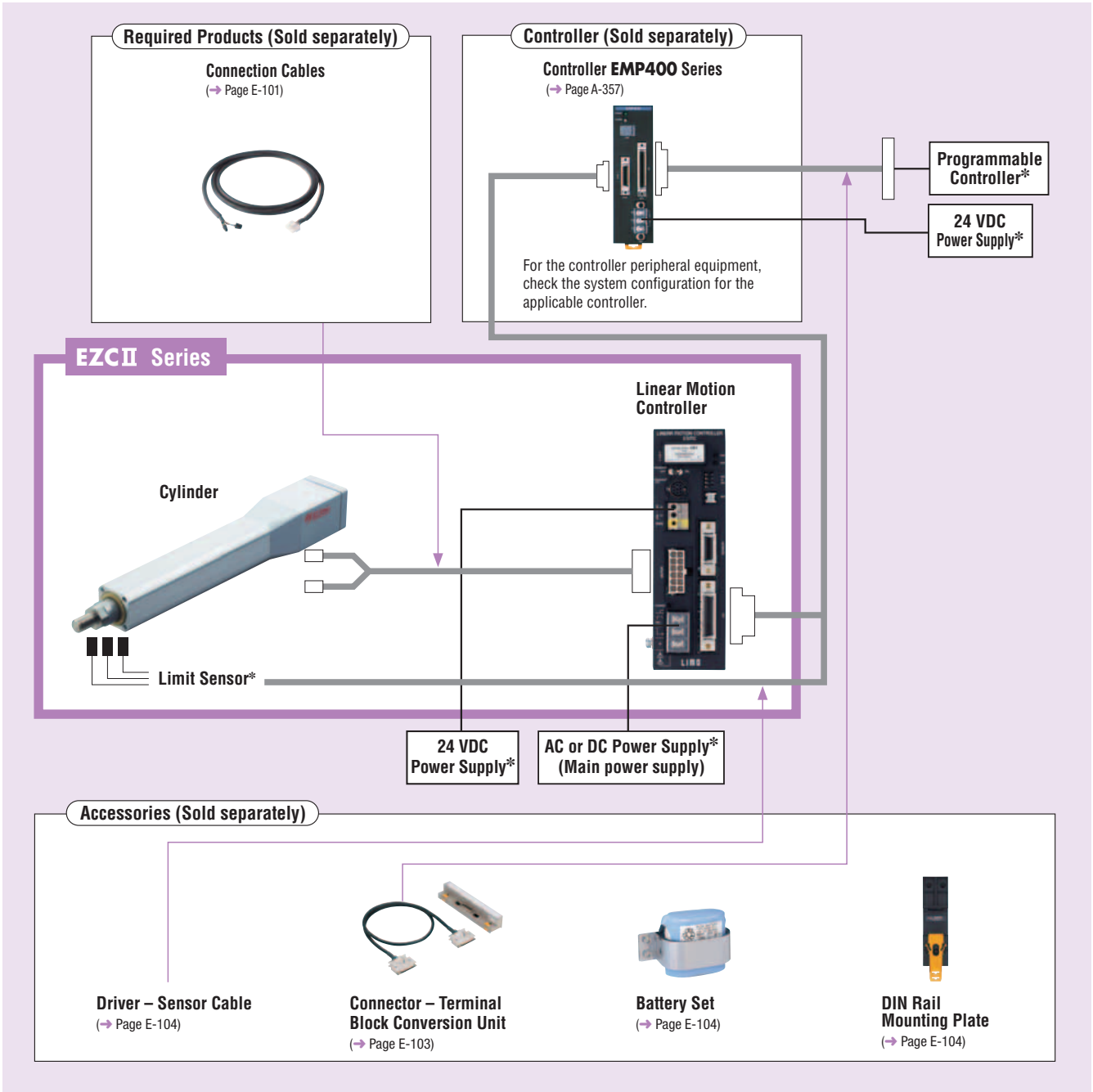
EZCII Series	Sold Separately			Sold Separately
	Connection Cable (2 m)	Teaching Pendant	+	I/O Cable (1 m)
EZC4E005-A	CC020ES-2	EZT1		CC36D1-1

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

*Not supplied

●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-58.
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

EZCII Series	Sold Separately		Sold Separately		
	Connection Cable (2 m)	+	Controller	Driver – Sensor Cable (0.5 m)	Connector – Terminal Block Conversion Unit (1 m)
EZC4E005-A	CC020ES-2		EMP401-1	CC005EZ6-EMPD	CC50T1

●The system configuration shown above is an example. Other combinations are available.
*Not supplied

Product Number Code

EZC 4 D 030 M - K

① ② ③ ④ ⑤ ⑥

①	Series	**EZC**: **EZCII** Series
②	Cylinder Size	**4**: Frame Size 42 mm × 42 mm **6**: Frame Size 60 mm × 60 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
⑤	Electromagnetic Brake	Blank: Without Electromagnetic Brake **M**: With Electromagnetic Brake
⑥	Power Supply Voltage	**K**: 24 VDC **A**: Single-Phase 100-115 VAC **C**: Single-Phase 200-230 VAC

Product Line

●EZC4

◇Without Electromagnetic Brake

Stroke	24 VDC	Single-Phase 100-115 VAC	Single-Phase 200-230 VAC
	Model	Model	Model
50 mm	**EZC4□005-K**	**EZC4□005-A**	**EZC4□005-C**
100 mm	**EZC4□010-K**	**EZC4□010-A**	**EZC4□010-C**
150 mm	**EZC4□015-K**	**EZC4□015-A**	**EZC4□015-C**
200 mm	**EZC4□020-K**	**EZC4□020-A**	**EZC4□020-C**
250 mm	**EZC4□025-K**	**EZC4□025-A**	**EZC4□025-C**
300 mm	**EZC4□030-K**	**EZC4□030-A**	**EZC4□030-C**

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

◇With Electromagnetic Brake

Stroke	24 VDC	Single-Phase 100-115 VAC	Single-Phase 200-230 VAC
	Model	Model	Model
50 mm	**EZC4□005M-K**	**EZC4□005M-A**	**EZC4□005M-C**
100 mm	**EZC4□010M-K**	**EZC4□010M-A**	**EZC4□010M-C**
150 mm	**EZC4□015M-K**	**EZC4□015M-A**	**EZC4□015M-C**
200 mm	**EZC4□020M-K**	**EZC4□020M-A**	**EZC4□020M-C**
250 mm	**EZC4□025M-K**	**EZC4□025M-A**	**EZC4□025M-C**
300 mm	**EZC4□030M-K**	**EZC4□030M-A**	**EZC4□030M-C**

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

●EZC6

◇Without Electromagnetic Brake

Stroke	24 VDC	Single-Phase 100-115 VAC	Single-Phase 200-230 VAC
	Model	Model	Model
50 mm	**EZC6□005-K**	**EZC6□005-A**	**EZC6□005-C**
100 mm	**EZC6□010-K**	**EZC6□010-A**	**EZC6□010-C**
150 mm	**EZC6□015-K**	**EZC6□015-A**	**EZC6□015-C**
200 mm	**EZC6□020-K**	**EZC6□020-A**	**EZC6□020-C**
250 mm	**EZC6□025-K**	**EZC6□025-A**	**EZC6□025-C**
300 mm	**EZC6□030-K**	**EZC6□030-A**	**EZC6□030-C**

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

◇With Electromagnetic Brake

Stroke	24 VDC	Single-Phase 100-115 VAC	Single-Phase 200-230 VAC
	Model	Model	Model
50 mm	**EZC6□005M-K**	**EZC6□005M-A**	**EZC6□005M-C**
100 mm	**EZC6□010M-K**	**EZC6□010M-A**	**EZC6□010M-C**
150 mm	**EZC6□015M-K**	**EZC6□015M-A**	**EZC6□015M-C**
200 mm	**EZC6□020M-K**	**EZC6□020M-A**	**EZC6□020M-C**
250 mm	**EZC6□025M-K**	**EZC6□025M-A**	**EZC6□025M-C**
300 mm	**EZC6□030M-K**	**EZC6□030M-A**	**EZC6□030M-C**

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

The following items are included in each product.

Cylinder, Controller, Mounting Bracket for Controller, Hexagonal Nut, User I/O Connector, Sensor I/O Connector, Operating Manual

General Specifications of Motor

●General specifications of controller ➜ Page E-91

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)

Note

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

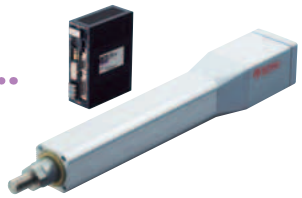
●Single-Phase 100-115 VAC/Single-Phase 200-230 VAC

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 **EZC4**: 1.0 kVAC 50 Hz **EZC6**: 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 cylinder and controller are connected.

EZC4: Frame Size 42 mm × 42 mm 24 VDC



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

Specifications of Cylinder RoHS CE

Drive Method	Ball Screw	Repetitive Positioning Accuracy [mm]	±0.02	Resolution [mm]	0.01

Model	Lead [mm]	Transportable Mass [kg]*1		Thrust [N]	Push Force [N]*2	Holding Force [N]*3	Maximum Speed [mm/s]
		Horizontal	Vertical				
EZC4D□-K	12	~15	–	~70	100	70	600
EZC4D□M-K			~6.5				
EZC4E□-K	6	~30	–	~140	200	140	300
EZC4E□M-K			~14				

● Enter the stroke length in the box (□) within the model name.
*1 The value when an external guide is used.
*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.

Notes

● Avoid using the cylinder in such a way that the rod receives an overhung load or angular load moment.
Provide a guide or other appropriate mechanism to prevent the rod from receiving a load other than in the axial direction. (A simple external anti-spin mechanism is provided.)
● The cylinder returns to home only towards the motor in sensorless return to home.

Product Number Code

EZC 4 D 030 M - K

① ② ③ ④ ⑤ ⑥

①	Series	**EZC**: **EZCII** Series
②	Cylinder Size	**4**: Frame Size 42 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	**EZC4D□-K**	EZCM4D□K	ESMC-K2
	EZC4E□-K	EZCM4E□K	
Equipped	**EZC4D□M-K**	EZCM4D□MK	
	EZC4E□M-K	EZCM4E□MK	

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

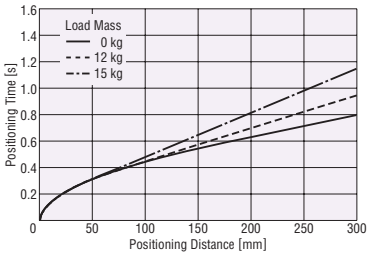
Check the Positioning Time

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

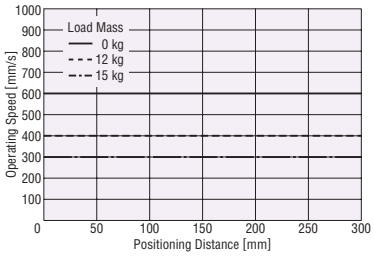
●EZC4D (Lead: 12 mm)

◇Horizontal Installation

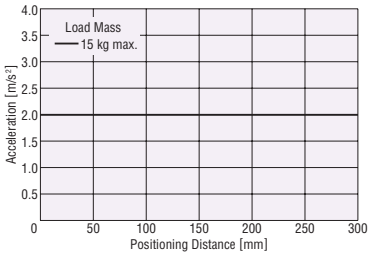
● Positioning Distance – Positioning Time



● Positioning Distance – Operating Speed

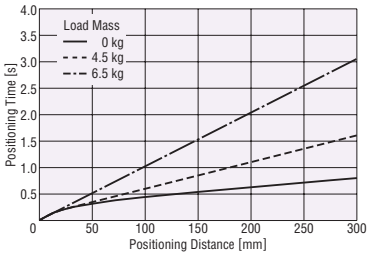


● Positioning Distance – Acceleration

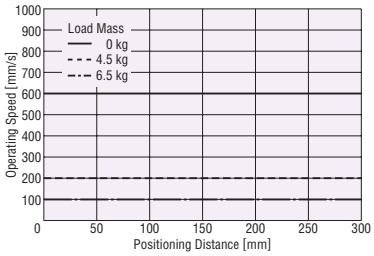


◇Vertical Installation

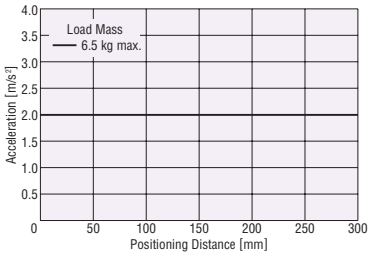
● Positioning Distance – Positioning Time



● Positioning Distance – Operating Speed



● Positioning Distance – Acceleration



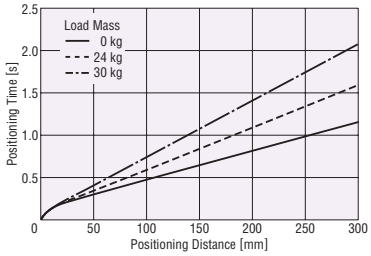
Notes

● The positioning time in the graph does not include the settling time. Use a settling time of 0.15 s as a reference. (Settling time is adjustable by the speed filter function.)
● The starting speed should be 6 mm/s or less.

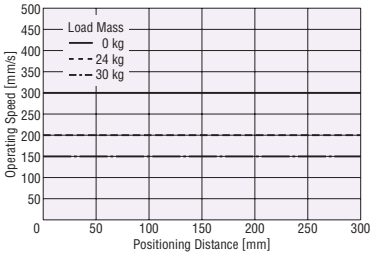
●EZC4E (Lead: 6 mm)

◇Horizontal Installation

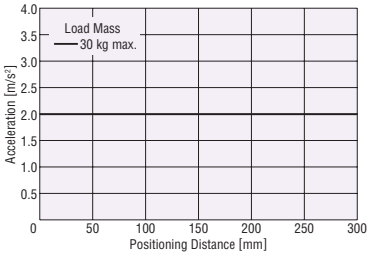
● Positioning Distance – Positioning Time



● Positioning Distance – Operating Speed

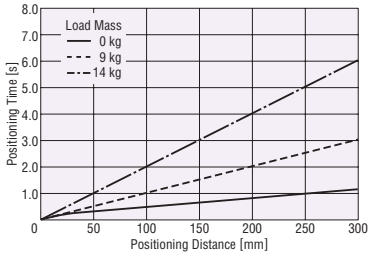


● Positioning Distance – Acceleration

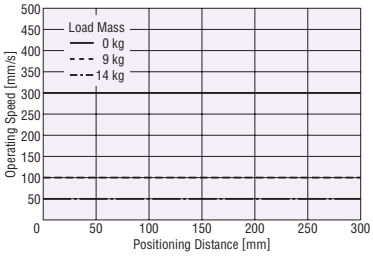


◇Vertical Installation

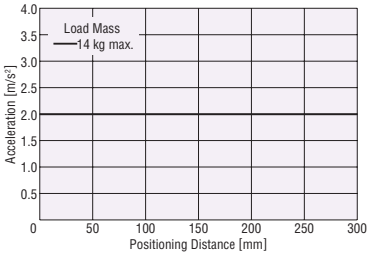
● Positioning Distance – Positioning Time



● Positioning Distance – Operating Speed



● Positioning Distance – Acceleration

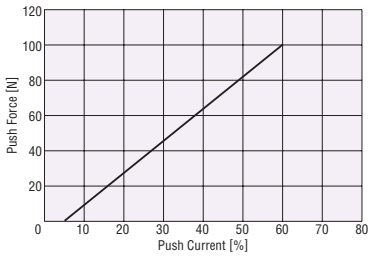


Notes

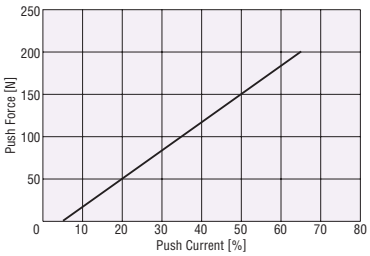
- The positioning time in the graph does not include the settling time. Use a settling time of 0.15 s as a reference. (Settling time is adjustable by the speed filter function.)
- The starting speed should be 6 mm/s or less.

Push Force

●EZC4D (Lead: 12 mm)



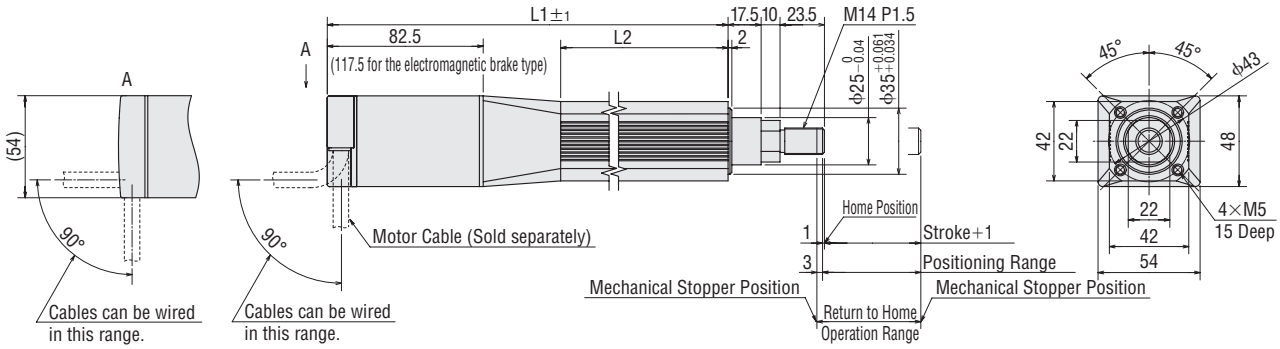
●EZC4E (Lead: 6 mm)



Notes

- When the cylinder is used in a vertical direction, an external force calculated by multiplying the weight of the carried object by the rate of gravitational acceleration must be considered. Measure the push force and set an appropriate push current. The graph shows a reference value of external force at horizontal operation.
- Operate the cylinder within the push current showing this graph.

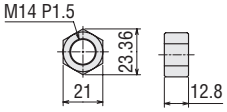
Dimensions of Cylinder Unit = mm



Cylinder Model: EZCM4D□K, EZCM4E□K (Without electromagnetic brake)
EZCM4D□MK, EZCM4E□MK (With electromagnetic brake)

	Electromagnetic Brake	Numbers Specifiable in the Box (□) within the cylinder Model Name					
		005	010	015	020	025	030
Stroke	Not Equipped/Equipped	50	100	150	200	250	300
L1	Not Equipped	235	285	335	385	435	485
	Equipped	270	320	370	420	470	520
L2	Not Equipped/Equipped	111.5	161.5	211.5	261.5	311.5	361.5
Mass [kg]	Not Equipped	1.3	1.5	1.7	1.9	2.0	2.2
	Equipped	1.5	1.7	1.9	2.1	2.2	2.4
DXF	Not Equipped	D1294	D1295	D1296	D1297	D1298	D1299
	Equipped	D1300	D1301	D1302	D1303	D1304	D1305

● Nut (1 piece, included)



EZC4: Frame Size 42 mm × 42 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 CE

Drive Method	Ball Screw	Repetitive Positioning Accuracy [mm]	±0.02	Resolution [mm]	0.01

Model	Lead [mm]	Transportable Mass [kg]*1		Thrust [N]	Push Force [N]*2	Holding Force [N]*3	Maximum Speed [mm/s]
		Horizontal	Vertical				
EZC4D□-■	12	~15	–	~70	100	70	600
EZC4D□M-■			~6.5				
EZC4E□-■	6	~30	–	~140	200	140	300
EZC4E□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.
*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.

Notes

- Avoid using the cylinder in such a way that the rod receives an overhung load or angular load moment.
  Provide a guide or other appropriate mechanism to prevent the rod from receiving a load other than in the axial direction. (Some simple external anti-spin mechanism is provided.)
- The cylinder returns to home only towards the motor in sensorless return to home.

Product Number Code

EZC 4 D 030 M - A

① ② ③ ④ ⑤ ⑥

①	Series	**EZC**: **EZCII** Series
②	Cylinder Size	**4**: Frame Size 42 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	**EZC4D□-A**	EZCM4D□A	ESMC-A2
	EZC4D□-C	EZCM4D□C	ESMC-C2
	EZC4E□-A	EZCM4E□A	ESMC-A2
	EZC4E□-C	EZCM4E□C	ESMC-C2
Equipped	**EZC4D□M-A**	EZCM4D□MA	ESMC-A2
	EZC4D□M-C	EZCM4D□MC	ESMC-C2
	EZC4E□M-A	EZCM4E□MA	ESMC-A2
	EZC4E□M-C	EZCM4E□MC	ESMC-C2

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

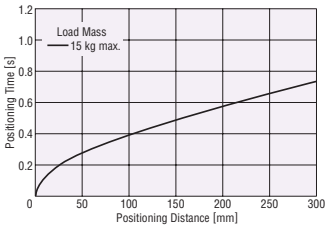
Check the Positioning Time

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

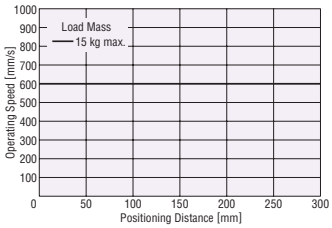
●EZC4D (Lead: 12 mm)

◇Horizontal Installation

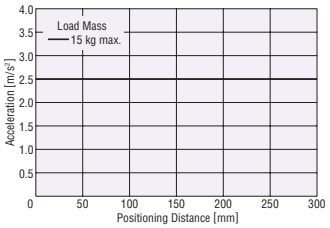
- Positioning Distance – Positioning Time



- Positioning Distance – Operating Speed

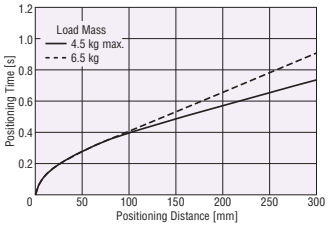


- Positioning Distance – Acceleration

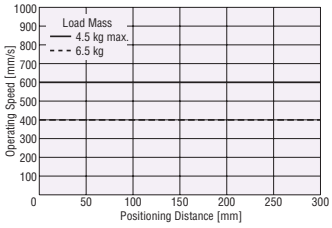


◇Vertical Installration

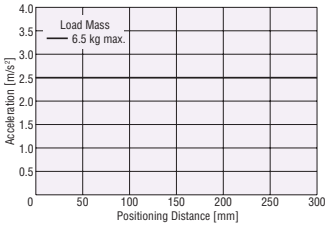
- Positioning Distance – Positioning Time



- Positioning Distance – Operating Speed



- Positioning Distance – Acceleration



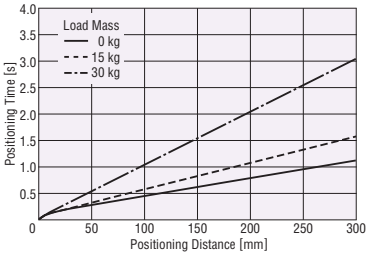
Notes

- The positioning time in the graph does not include the settling time. Use a settling time of 0.15 s as a reference. (Settling time is adjustable by the speed filter function.)
- The starting speed should be 6 mm/s or less.

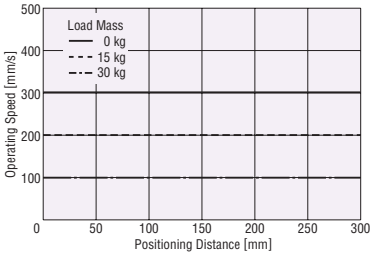
●EZC4E (Lead: 6 mm)

◇Horizontal Installation

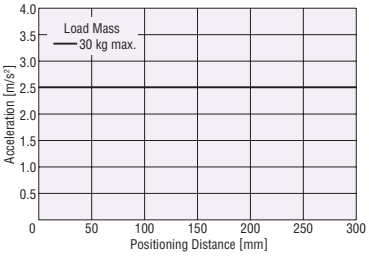
● Positioning Distance – Positioning Time



● Positioning Distance – Operating Speed

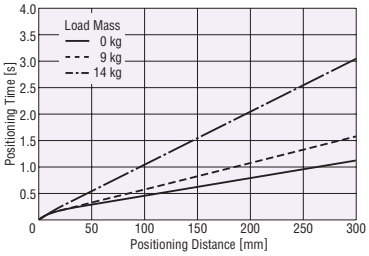


● Positioning Distance – Acceleration

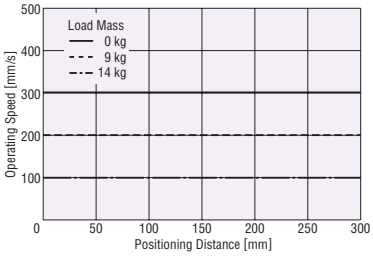


◇Vertical Installration

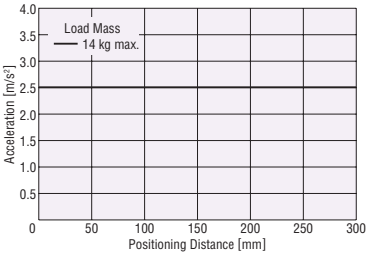
● Positioning Distance – Positioning Time



● Positioning Distance – Operating Speed



● Positioning Distance – Acceleration

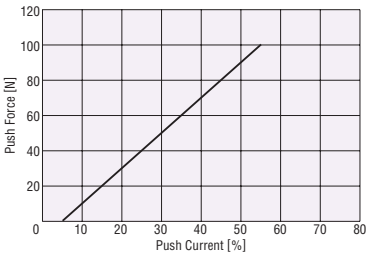


Notes

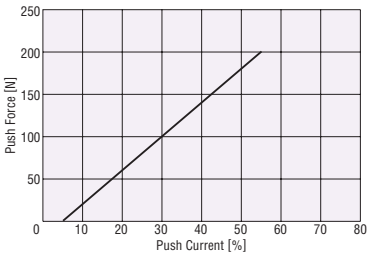
- The positioning time in the graph does not include the settling time. Use a settling time of 0.15 s as a reference. (Settling time is adjustable by the speed filter function.)
- The starting speed should be 6 mm/s or less.

Push Force

●EZC4D (Lead: 12 mm)



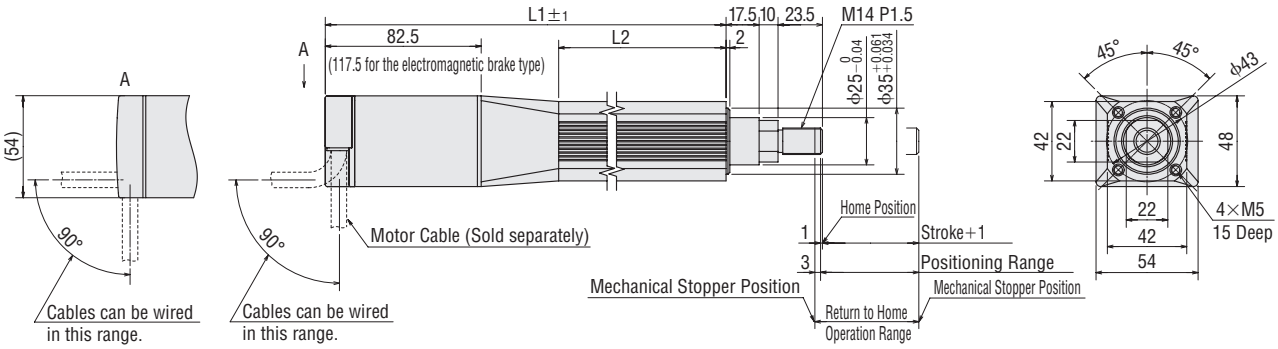
●EZC4E (Lead: 6 mm)



Notes

- When the cylinder is used in a vertical direction, an external force calculated by multiplying the weight of the carried object by the rate of gravitational acceleration must be considered. Measure the push force and set an appropriate push current. The graph shows a reference value of external force at horizontal operation.
- Operate the cylinder within the push current showing this graph.

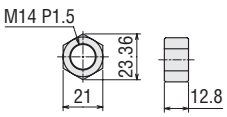
Dimensions of Cylinder Unit = mm



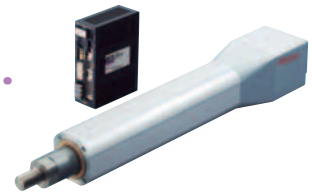
Cylinder Model: EZCM4D□A, EZCM4E□A, EZCM4D□C, EZCM4E□C (Without electromagnetic brake)
EZCM4D□MA, EZCM4E□MA, EZCM4D□MC, EZCM4E□MC (With electromagnetic brake)

	Electromagnetic Brake	Numbers Specifiable in the Box (□) within the Cylinder Model Name					
		005	010	015	020	025	030
Stroke	Not Equipped/Equipped	50	100	150	200	250	300
L1	Not Equipped	235	285	335	385	435	485
	Equipped	270	320	370	420	470	520
L2	Not Equipped/Equipped	111.5	161.5	211.5	261.5	311.5	361.5
Mass [kg]	Not Equipped	1.3	1.5	1.7	1.9	2.0	2.2
	Equipped	1.5	1.7	1.9	2.1	2.2	2.4
DXF	Not Equipped	D1294	D1295	D1296	D1297	D1298	D1299
	Equipped	D1300	D1301	D1302	D1303	D1304	D1305

● Nut (1 piece, included)



EZC6: Frame Size 60 mm × 60 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 CE

Drive Method	Ball Screw	Repetitive Positioning Accuracy [mm]	±0.02	Resolution [mm]	0.01

Model	Lead [mm]	Transportable Mass [kg]*1		Thrust [N]	Push Force [N]*2	Holding Force [N]*3	Maximum Speed [mm/s]
		Horizontal	Vertical				
EZC6D□-K	12	~30	–	~200	400	200	600
EZC6D□M-K			~15				
EZC6E□-K	6	~60	–	~400	500	400	300
EZC6E□M-K			~30				

● Enter the stroke length in the box (□) within the model name.
✻1 The value when an external guide is used.
✻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.

Notes

● Avoid using the cylinder in such a way that the rod receives an overhung load or angular load moment.
Provide a guide or other appropriate mechanism to prevent the rod from receiving a load other than in the axial direction. (Some simple external anti-spin mechanism is provided.)
● The cylinder returns to home only towards the motor in sensorless return to home.

Product Number Code

EZC 6 D 030 M - K

① ② ③ ④ ⑤ ⑥

①	Series	**EZC**: **EZCII** Series
②	Cylinder Size	**6**: Frame Size 60 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	**EZC6D□-K**	EZCM6D□K	ESMC-K2
	EZC6E□-K	EZCM6E□K	
Equipped	**EZC6D□M-K**	EZCM6D□MK	
	EZC6E□M-K	EZCM6E□MK	

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

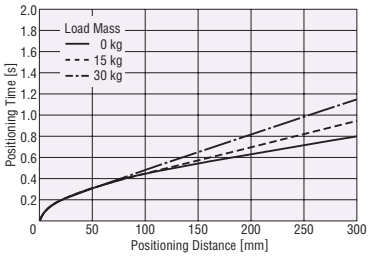
Check the Positioning Time

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

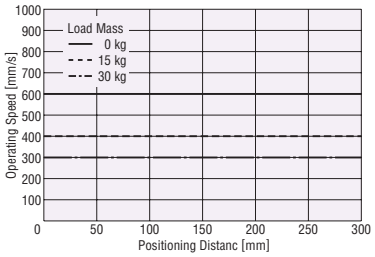
● EZC6D (Lead: 12 mm)

◇Horizontal Installation

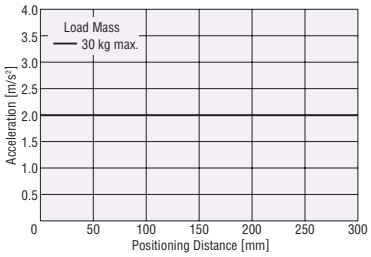
● Positioning Distance – Positioning Time



● Positioning Distance – Operating Speed

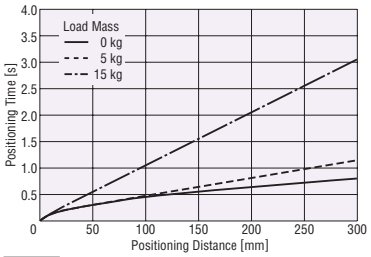


● Positioning Distance – Acceleration

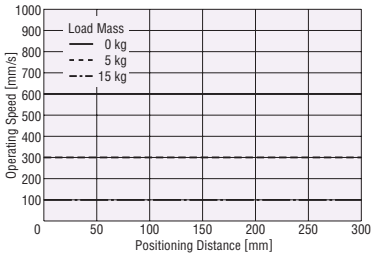


◇Vertical Installration

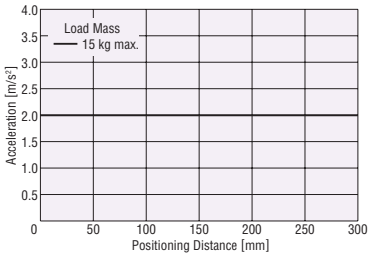
● Positioning Distance – Positioning Time



● Positioning Distance – Operating Speed



● Positioning Distance – Acceleration



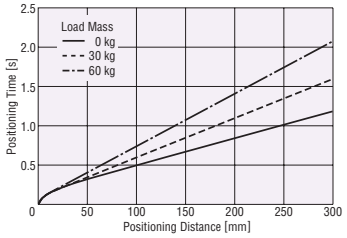
Notes

● The positioning time in the graph does not include the settling time. Use a settling time of 0.15 s as a reference. (Settling time is adjustable by the speed filter function.)
● The starting speed should be 6 mm/s or less.

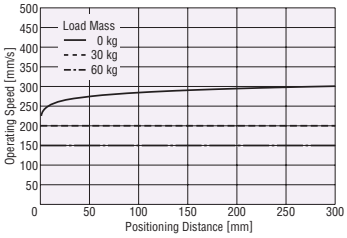
●EZC6E (Lead: 6 mm)

◇Horizontal Installation

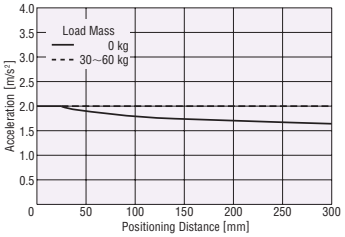
● Positioning Distance – Positioning Time



● Positioning Distance – Operating Speed

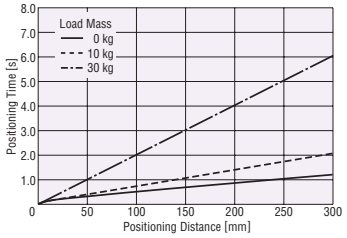


● Positioning Distance – Acceleration

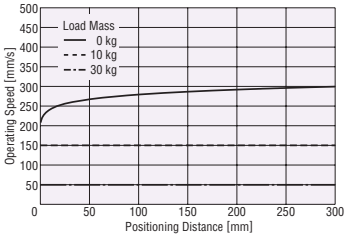


◇Vertical Installration

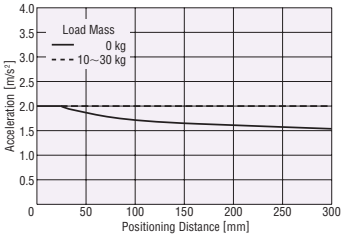
● Positioning Distance – Positioning Time



● Positioning Distance – Operating Speed



● Positioning Distance – Acceleration

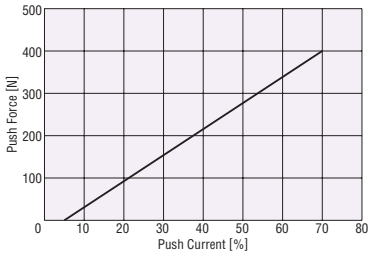


Notes

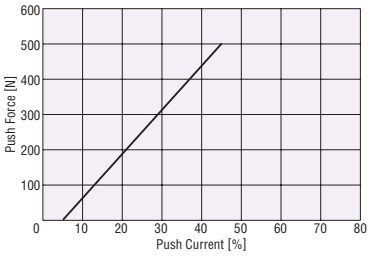
- The positioning time in the graph does not include the settling time. Use a settling time of 0.15 s as a reference. (Settling time is adjustable by the speed filter function.)
- The starting speed should be 6 mm/s or less.

Push Force

●EZC6D (Lead: 12 mm)



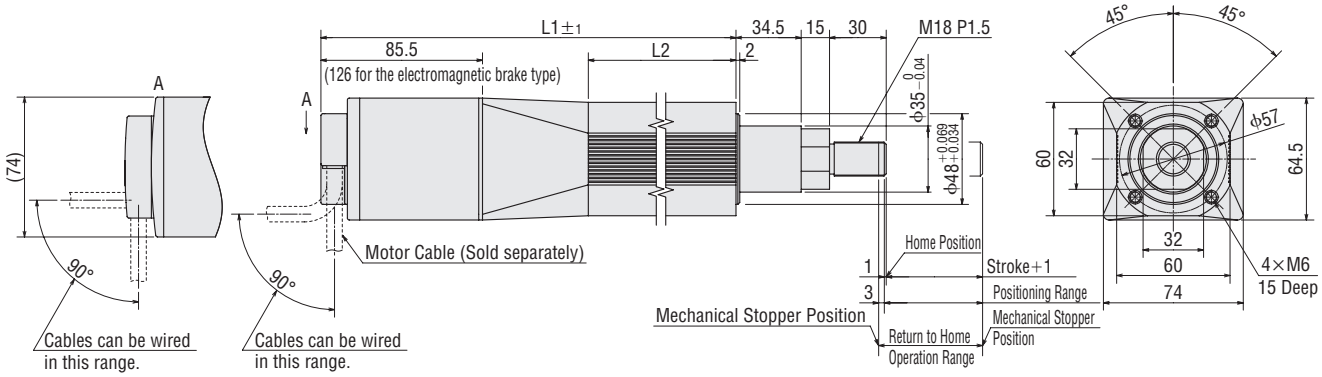
●EZC6E (Lead: 6 mm)



Notes

- When the cylinder is used in a vertical direction, an external force calculated by multiplying the weight of the carried object by the rate of gravitational acceleration must be considered. Measure the push force and set an appropriate push current. The graph shows a reference value of external force at horizontal operation.
- Operate the cylinder within the push current showing this graph.

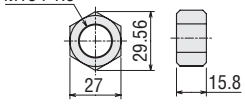
Dimensions of Cylinder Unit = mm



Cylinder Model: EZCM6D□K, EZCM6E□K (Without electromagnetic brake)
EZCM6D□MK, EZCM6E□MK (With electromagnetic brake)

	Electromagnetic Brake	Numbers Specifiable in the Box (□) within the Cylinder Model Name					
		005	010	015	020	025	030
Stroke	Not Equipped/Equipped	50	100	150	200	250	300
L1	Not Equipped	253.5	303.5	353.5	403.5	453.5	503.5
	Equipped	294	344	394	444	494	544
L2	Not Equipped/Equipped	112	162	212	262	312	362
Mass [kg]	Not Equipped	2.7	3.0	3.3	3.6	3.9	4.2
	Equipped	3.1	3.4	3.7	4.0	4.3	4.6
DXF	Not Equipped	D1306	D1307	D1308	D1309	D1310	D1311
	Equipped	D1312	D1313	D1314	D1315	D1316	D1317

● Nut (1 piece, included)



EZC6: Frame Size 60 mm × 60 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 CE

Drive Method	Ball Screw	Repetitive Positioning Accuracy [mm]	±0.02	Resolution [mm]	0.01

Model	Lead [mm]	Transportable Mass [kg]*1		Thrust [N]	Push Force [N]*2	Holding Force [N]*3	Maximum Speed [mm/s]
		Horizontal	Vertical				
EZC6D□-■	12	~30	–	~200	400	200	600
EZC6D□M-■			~15				
EZC6E□-■	6	~60	–	~400	500	400	300
EZC6E□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.
*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.

Notes

- Avoid using the cylinder in such a way that the rod receives an overhung load or angular load moment.
  Provide a guide or other appropriate mechanism to prevent the rod from receiving a load other than in the axial direction. (Some simple external anti-spin mechanism is provided.)
- The cylinder returns to home only towards the motor in sensorless return to home.

Product Number Code

EZC 6 D 030 M - A

① ② ③ ④ ⑤ ⑥

①	Series	**EZC**: **EZCII** Series
②	Cylinder Size	**6**: Frame Size 60 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	**EZC6D□-A**	EZCM6D□A	ESMC-A2
	EZC6D□-C	EZCM6D□C	ESMC-C2
	EZC6E□-A	EZCM6E□A	ESMC-A2
	EZC6E□-C	EZCM6E□C	ESMC-C2
Equipped	**EZC6D□M-A**	EZCM6D□MA	ESMC-A2
	EZC6D□M-C	EZCM6D□MC	ESMC-C2
	EZC6E□M-A	EZCM6E□MA	ESMC-A2
	EZC6E□M-C	EZCM6E□MC	ESMC-C2

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

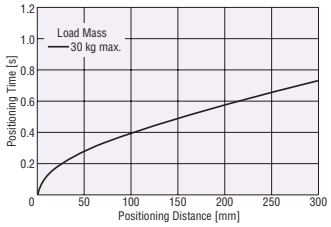
Check the Positioning Time

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

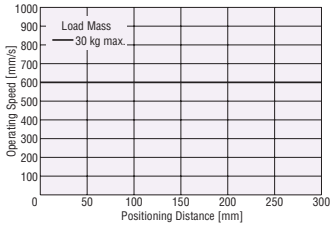
●EZC6D (Lead: 12 mm)

◇Horizontal Installation

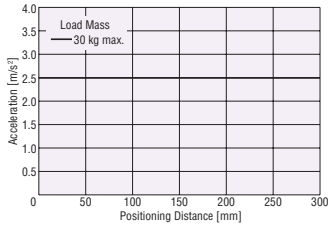
● Positioning Distance – Positioning Time



● Positioning Distance – Operating Speed

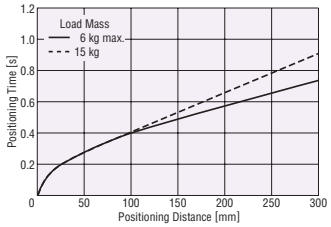


● Positioning Distance – Acceleration

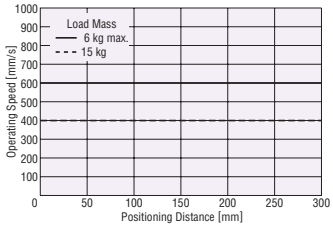


◇Vertical Installration

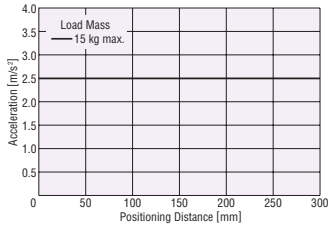
● Positioning Distance – Positioning Time



● Positioning Distance – Operating Speed



● Positioning Distance – Acceleration



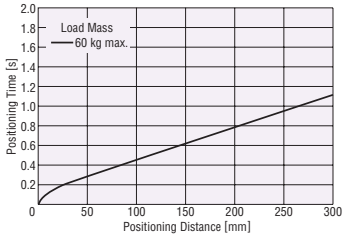
Notes

- The positioning time in the graph does not include the settling time. Use a settling time of 0.15 s as a reference. (Settling time is adjustable by the speed filter function.)
- The starting speed should be 6 mm/s or less.

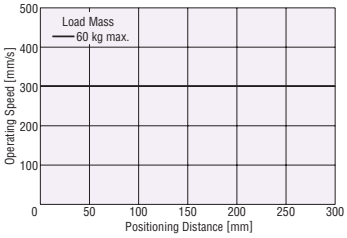
●EZC6E (Lead: 6 mm)

◇Horizontal Installation

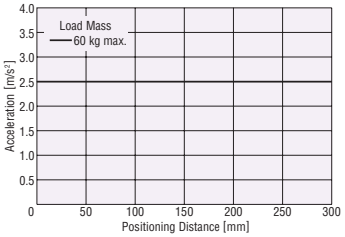
● Positioning Distance – Positioning Time



● Positioning Distance – Operating Speed

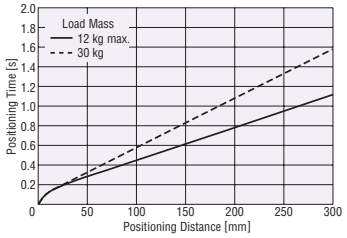


● Positioning Distance – Acceleration

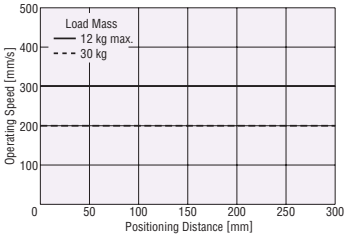


◇Vertical Installration

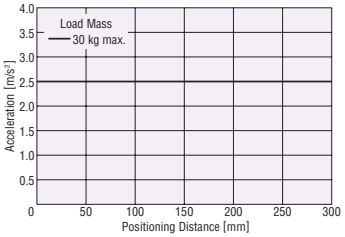
● Positioning Distance – Positioning Time



● Positioning Distance – Operating Speed



● Positioning Distance – Acceleration

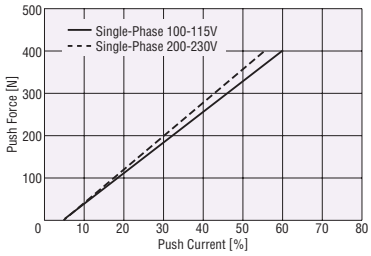


Notes

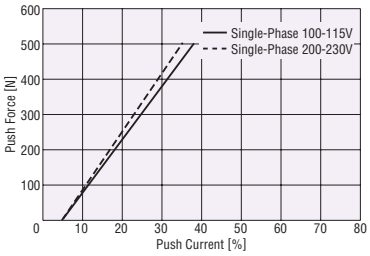
- The positioning time in the graph does not include the settling time. Use a settling time of 0.15 s as a reference. (Settling time is adjustable by the speed filter function.)
- The starting speed should be 6 mm/s or less.

Push Force

●EZC6D (Lead: 12 mm)



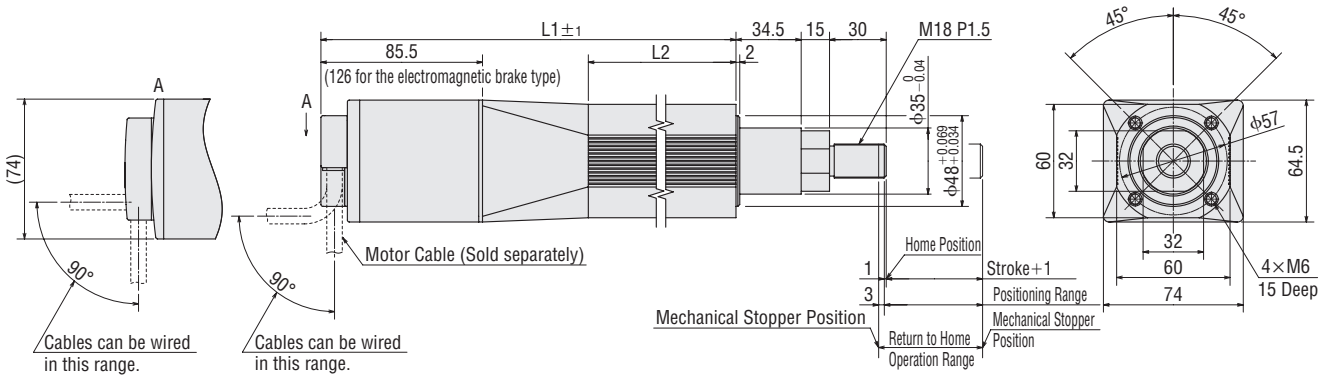
●EZC6E (Lead: 6 mm)



Notes

- When the cylinder is used in a vertical direction, an external force calculated by multiplying the weight of the carried object by the rate of gravitational acceleration must be considered. Measure the push force and set an appropriate push current. The graph shows a reference value of external force at horizontal operation.
- Operate the cylinder within the push current showing this graph.

Dimensions of Cylinder Unit = mm



Cylinder Model: EZCM6D□A, EZCM6E□A, EZCM6D□C, EZCM6E□C (Without electromagnetic brake)
EZCM6D□MA, EZCM6E□MA, EZCM6D□MC, EZCM6E□MC (With electromagnetic brake)

	Electromagnetic Brake	Numbers Specifiable in the Box (□) within the Cylinder Model Name					
		005	010	015	020	025	030
Stroke	Not Equipped/Equipped	50	100	150	200	250	300
L1	Not Equipped	253.5	303.5	353.5	403.5	453.5	503.5
	Equipped	294	344	394	444	494	544
L2	Not Equipped/Equipped	112	162	212	262	312	362
Mass [Kg]	Not Equipped	2.7	3.0	3.3	3.6	3.9	4.2
	Equipped	3.1	3.4	3.7	4.0	4.3	4.6
DXF	Not Equipped	D1306	D1307	D1308	D1309	D1310	D1311
	Equipped	D1312	D1313	D1314	D1315	D1316	D1317

● Nut (1 piece, included)