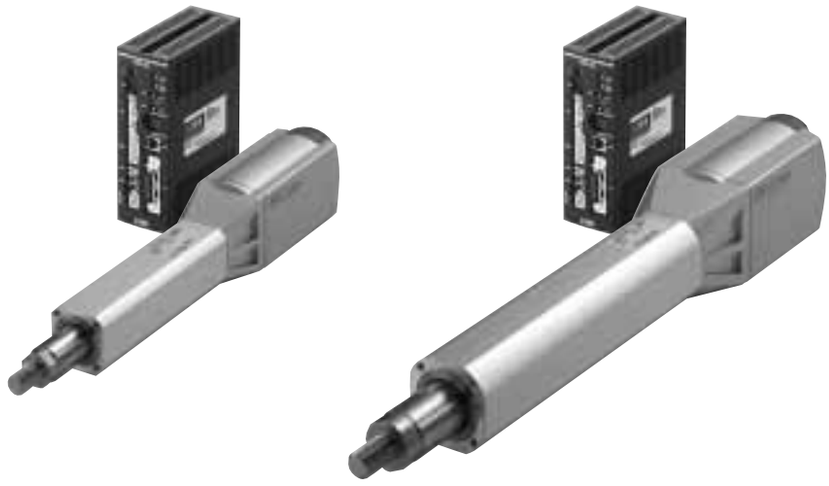
EZC Series
EZHC Series
EZHP Series

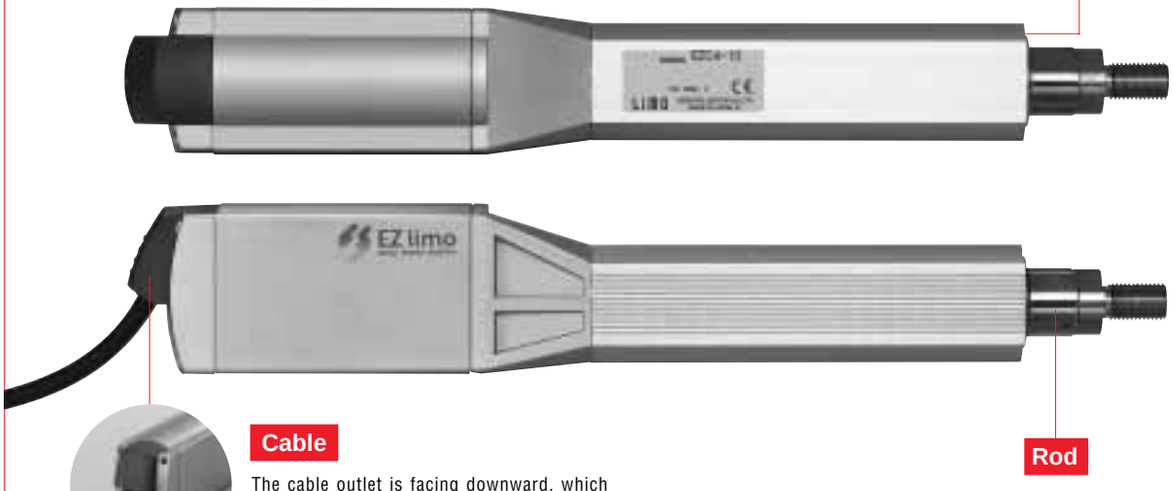
EZC Series



Names and Functions of the Cylinder

Mounting holes

The cylinder can be installed through the dedicated mounting holes, or via flange connection using an optional mounting bracket.

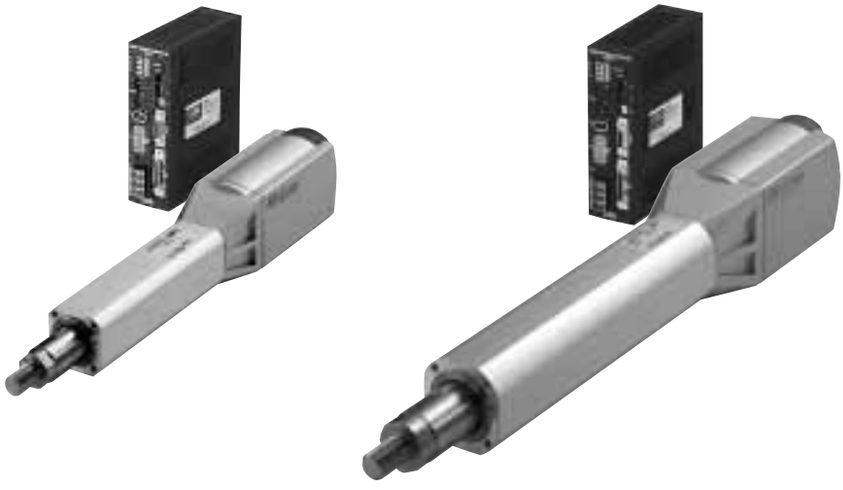


Cable

The cable outlet is facing downward, which contributes to the overall space savings by reducing the space needed to wire the cables.

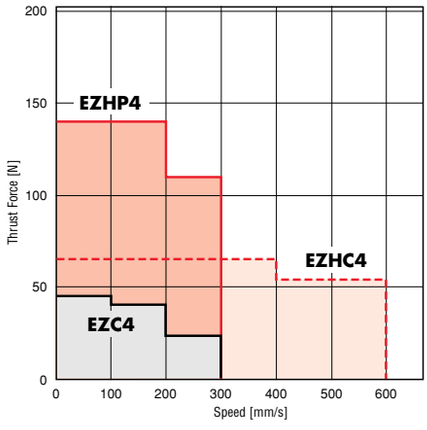
Rod

EZHC Series
EZHP Series

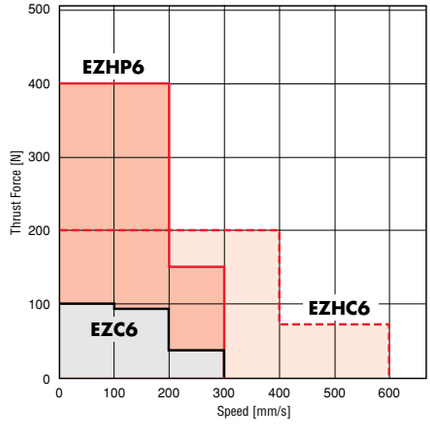


Motorized Cylinder Speed – Thrust Force Characteristics

EZC4/EZHC4/EZHP4



EZC6/EZHC6/EZHP6



■ Models

●EZC Series

◇Incremental Type

Without Electromagnetic Brake 24 VDC Input

Stroke	Model	
50mm	**EZC4-05CI**	**EZC6-05CI**
100mm	**EZC4-10CI**	**EZC6-10CI**
200mm	**EZC4-20CI**	**EZC6-20CI**
300mm	**EZC4-30CI**	**EZC6-30CI**

With Electromagnetic Brake 24 VDC Input

Stroke	Model	
50mm	**EZC4-05MCI**	**EZC6-05MCI**
100mm	**EZC4-10MCI**	**EZC6-10MCI**
200mm	**EZC4-20MCI**	**EZC6-20MCI**
300mm	**EZC4-30MCI**	**EZC6-30MCI**

◇Absolute Type

Without Electromagnetic Brake 24 VDC Input

Stroke	Model	
50mm	**EZC4-05CA**	**EZC6-05CA**
100mm	**EZC4-10CA**	**EZC6-10CA**
200mm	**EZC4-20CA**	**EZC6-20CA**
300mm	**EZC4-30CA**	**EZC6-30CA**

With Electromagnetic Brake 24 VDC Input

Stroke	Model	
50mm	**EZC4-05MCA**	**EZC6-05MCA**
100mm	**EZC4-10MCA**	**EZC6-10MCA**
200mm	**EZC4-20MCA**	**EZC6-20MCA**
300mm	**EZC4-30MCA**	**EZC6-30MCA**

■ Product Number Code

●EZC Series

EZC ① **4** ② - **10** ③ **M** ④ **C** ⑤ **I** ⑥

①	**EZC** Series	④	None：Without Electromagnetic Brake **M** ：With Electromagnetic Brake
②	Cylinder Size	⑤	With Controller
③	Stroke **05**： 50mm **10**：100mm **20**：200mm **30**：300mm	⑥	**I** ：Incremental Type **A**：Absolute Type

●EZHC Series、EZHP Series

EZHC ① **4** ② **A** ③ - **10** ④ **M** ⑤ **I** ⑥

①	**EZHC**：**EZHC** Series **EZHP**：**EZHP** Series	④	Stroke **05**： 50mm **10**：100mm **20**：200mm **30**：300mm
②	Cylinder Size	⑤	None：Without Electromagnetic Brake **M** ：With Electromagnetic Brake
③	Power Supply **A** ： Single-Phase 100-115V **C** ： Single-Phase 200-230V	⑥	**I** ： Incremental Type **A** ： Absolute Type

●EZHC Series

◇Incremental Type

Without Electromagnetic Brake Single-Phase 100-115 V Input

Stroke	Model	
50mm	**EZHC4A-05I**	**EZHC6A-05I**
100mm	**EZHC4A-10I**	**EZHC6A-10I**
200mm	**EZHC4A-20I**	**EZHC6A-20I**
300mm	**EZHC4A-30I**	**EZHC6A-30I**

Single-Phase 200-230 V Input

Stroke	Model
50mm	**EZHC6C-05I**
100mm	**EZHC6C-10I**
200mm	**EZHC6C-20I**
300mm	**EZHC6C-30I**

With Electromagnetic Brake Single-Phase 100-115 V Input

Stroke	Model	
50mm	**EZHC4A-05MI**	**EZHC6A-05MI**
100mm	**EZHC4A-10MI**	**EZHC6A-10MI**
200mm	**EZHC4A-20MI**	**EZHC6A-20MI**
300mm	**EZHC4A-30MI**	**EZHC6A-30MI**

Single-Phase 200-230 V Input

Stroke	Model
50mm	**EZHC6C-05MI**
100mm	**EZHC6C-10MI**
200mm	**EZHC6C-20MI**
300mm	**EZHC6C-30MI**

◇Absolute Type

Without Electromagnetic Brake Single-Phase 100-115 V Input

Stroke	Model	
50mm	**EZHC4A-05A**	**EZHC6A-05A**
100mm	**EZHC4A-10A**	**EZHC6A-10A**
200mm	**EZHC4A-20A**	**EZHC6A-20A**
300mm	**EZHC4A-30A**	**EZHC6A-30A**

Single-Phase 200-230 V Input

Stroke	Model
50mm	**EZHC6C-05A**
100mm	**EZHC6C-10A**
200mm	**EZHC6C-20A**
300mm	**EZHC6C-30A**

With Electromagnetic Brake Single-Phase 100-115 V Input

Stroke	Model	
50mm	**EZHC4A-05MA**	**EZHC6A-05MA**
100mm	**EZHC4A-10MA**	**EZHC6A-10MA**
200mm	**EZHC4A-20MA**	**EZHC6A-20MA**
300mm	**EZHC4A-30MA**	**EZHC6A-30MA**

Single-Phase 200-230 V Input

Stroke	Model
50mm	**EZHC6C-05MA**
100mm	**EZHC6C-10MA**
200mm	**EZHC6C-20MA**
300mm	**EZHC6C-30MA**

●EZHP Series

◇Incremental Type

Without Electromagnetic Brake Single-Phase 100-115V Input

Stroke	Model	
50mm	**EZHP4A-05I**	**EZHP6A-05I**
100mm	**EZHP4A-10I**	**EZHP6A-10I**
200mm	**EZHP4A-20I**	**EZHP6A-20I**
300mm	**EZHP4A-30I**	**EZHP6A-30I**

Single-Phase 200-230V Input

Stroke	Model
50mm	**EZHP6C-05I**
100mm	**EZHP6C-10I**
200mm	**EZHP6C-20I**
300mm	**EZHP6C-30I**

With Electromagnetic Brake Single-Phase 100-115V Input

Stroke	Model	
50mm	**EZHP4A-05MI**	**EZHP6A-05MI**
100mm	**EZHP4A-10MI**	**EZHP6A-10MI**
200mm	**EZHP4A-20MI**	**EZHP6A-20MI**
300mm	**EZHP4A-30MI**	**EZHP6A-30MI**

Single-Phase 200-230V Input

Stroke	Model
50mm	**EZHP6C-05MI**
100mm	**EZHP6C-10MI**
200mm	**EZHP6C-20MI**
300mm	**EZHP6C-30MI**

◇Absolute Type

Without Electromagnetic Brake Single-Phase 100-115V Input

Stroke	Model	
50mm	**EZHP4A-05A**	**EZHP6A-05A**
100mm	**EZHP4A-10A**	**EZHP6A-10A**
200mm	**EZHP4A-20A**	**EZHP6A-20A**
300mm	**EZHP4A-30A**	**EZHP6A-30A**

Single-Phase 200-230V Input

Stroke	Model
50mm	**EZHP6C-05A**
100mm	**EZHP6C-10A**
200mm	**EZHP6C-20A**
300mm	**EZHP6C-30A**

With Electromagnetic Brake Single-Phase 100-115V Input

Stroke	Model	
50mm	**EZHP4A-05MA**	**EZHP6A-05MA**
100mm	**EZHP4A-10MA**	**EZHP6A-10MA**
200mm	**EZHP4A-20MA**	**EZHP6A-20MA**
300mm	**EZHP4A-30MA**	**EZHP6A-30MA**

Single-Phase 200-230V Input

Stroke	Model
50mm	**EZHP6C-05MA**
100mm	**EZHP6C-10MA**
200mm	**EZHP6C-20MA**
300mm	**EZHP6C-30MA**

EZC Series

EZC4

Specifications

Model	Incremental Type	EZC4-□CI			EZC4-□MCI		
	Absolute Type	EZC4-□CA			EZC4-□MCA		
Motor Type		Stepping Motor with Encoder					
Drive Method		Ball Screw					
Electromagnetic Brake		Not equipped			Equipped		
Speed Range mm/s		～100	～200	～300	～100	～200	～300
Max. Transportable Mass kg	Horizontal Direction*	—	—	—	—	—	—
	Vertical Direction	—	—	—	4.5	4	2
Max. Acceleration m/s²	Horizontal Direction	—			—		
	Vertical Direction	—			2		
Max. Thrust Force N kgf		45 4.5	40 4	23 2.3	45 4.5	40 4	23 2.3
Push Force N kgf		45 4.5 (Speed: 6 mm/s or less)					
Max. Holding Brake Force N kgf	Power ON	45 4.5			45 4.5		
	Power OFF	—			—		
	Electromagnetic Brake	—			45 4.5		
Repetitive Positioning Accuracy mm		±0.02					
Resolution mm		0.015					
Lead mm		12					
Stroke mm		50、100、200、300					
Cylinder Mass kg (Figure in the parentheses shows the mass of the model with electromagnetic brake.)		**Stroke**	**50** : 1.6 (1.8)	**100** : 1.9 (2.1)	**200** : 2.4 (2.6)	**300** : 2.9 (3.1)	
Ambient Temperature ℃		0～+40 (Nonfreezing)					

*In a horizontal direction, the value cannot be shown because it varies by frictional resistance of the sliding surface.

●See page 52 for the specification and dimensions of the controller.

General Specifications

Item	Specification
Insulation Resistance	100 MΩ minimum when measured by a DC 500 V megger between the following places. ・Windings — Case ・Case — Windings of electromagnetic brake (Only for electromagnetic brake equipped model)
Dielectric Strength	Sufficient to withstand the following for one minute. ・Windings — Case AC 0.5 kV 50 Hz ・Case — Windings of electromagnetic brake AC 0.5 kV 50 Hz (Only for electromagnetic brake equipped model)

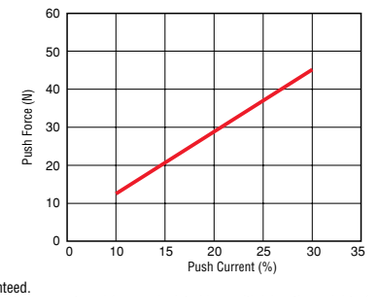
Cylinder/Controller Combinations

Type	Electromagnetic Brake	Model	Cylinder Model	Controller Model
Incremental Type	Not equipped	**EZC4-□CI**	EZC4-□	EZMC36I
	Equipped	**EZC4-□MCI**	EZC4-□M	
Absolute Type	Not equipped	**EZC4-□CA**	EZC4-□	EZMC36A
	Equipped	**EZC4-□MCA**	EZC4-□M	

*The box (□) in the model name and cylinder model name represents the code for stroke length.

Push Force

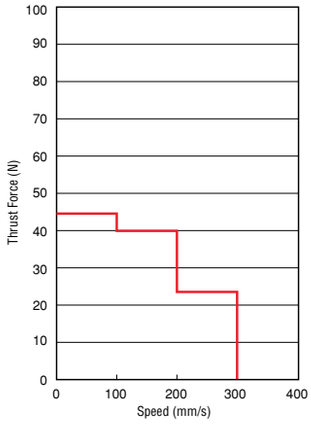
Push force can be set through "Push current setting" in the parameter mode.



Notes:
- The above value is a reference, not guaranteed.
- 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 is applied. Therefore, the cylinder push force must be set so as to accommodate this external force. Measure the push force using an actual load, and set an appropriate push current.

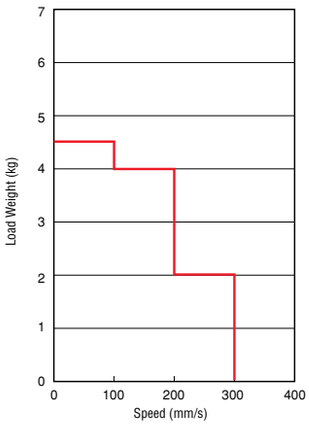
Correlation Diagram of Speed and Thrust Force

●Horizontal Direction/ Vertical Direction



Correlation Diagram of Speed and Load Weight

●Vertical Direction

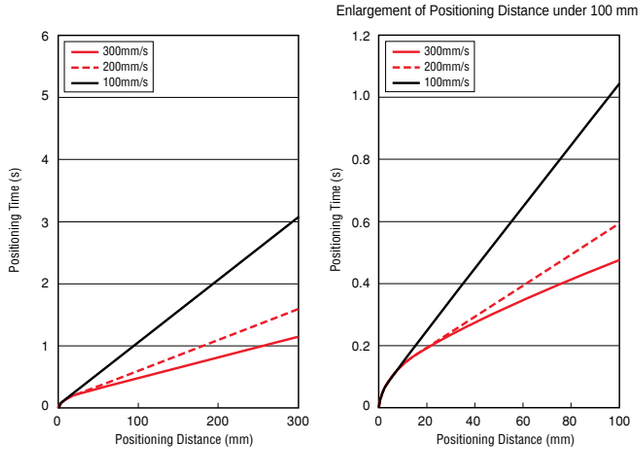


Minimum Positioning Time

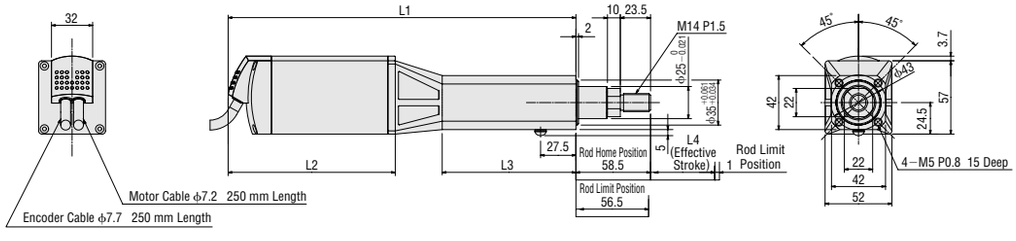
Acceleration: 2 m/s² Starting Speed: 6 mm/s

●Horizontal Direction/ Vertical Direction

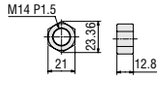
Enlargement of Positioning Distance under 100 mm



Dimensions unit: mm



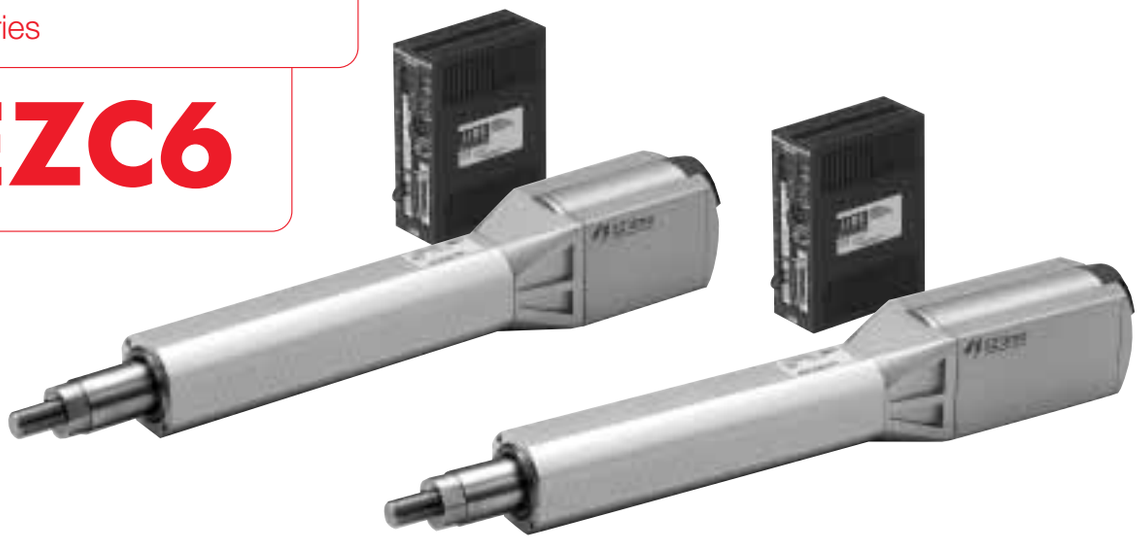
●Nut (included) 1 piece



Cylinder Model	L1	L2	L3	L4
EZC4-05	270.5	130	104	50
EZC4-05M	300.5	160		
EZC4-10	320.5	130	154	100
EZC4-10M	350.5	160		
EZC4-20	420.5	130	254	200
EZC4-20M	450.5	160		
EZC4-30	520.5	130	354	300
EZC4-30M	550.5	160		

EZC Series

EZC6



Specifications

Model		Incremental Type	EZC6-□CI			EZC6-□MCI		
		Absolute Type	EZC6-□CA			EZC6-□MCA		
Motor Type			Stepping Motor with Encoder					
Drive Method			Ball Screw					
Electromagnetic Brake			Not equipped			Equipped		
Speed Range	mm/s		～100	～200	～300	～100	～200	～300
Max. Transportable Mass	kg	Horizontal Direction*	—	—	—	—	—	—
		Vertical Direction	—	—	—	10	8	3
Max. Acceleration	m/s²	Horizontal Direction	—			—		
		Vertical Direction	—			2		
Max. Thrust Force	N kgf		100 10	94 9.4	35 3.5	100 10	94 9.4	35 3.5
Push Force	N kgf		100 10 (Speed: 6 mm/s or less)					
Max. Holding Brake Force	N kgf	Power ON	100 10			100 10		
		Power OFF	—			—		
		Electromagnetic Brake	—			100 10		
Repetitive Positioning Accuracy	mm		±0.02					
Resolution	mm		0.015					
Lead	mm		12					
Stroke	mm		50、100、200、300					
Cylinder Mass (Figure in the parentheses shows the mass of the model with electromagnetic brake.)	kg		**Stroke**	**50** : 3.2 (3.6)	**100** : 3.6 (4.0)	**200** : 4.5 (4.9)	**300** : 5.5 (5.9)	
Ambient Temperature	℃		0～+40(Nonfreezing)					

*In a horizontal direction, the value cannot be shown because it varies by frictional resistance of the sliding surface.

●See page 52 for the specification and dimensions of the controller.

General Specifications

Item	Specification
Insulation Resistance	100 MΩ minimum when measured by a DC 500 V megger between the following places. ・Windings — Case ・Case — Windings of electromagnetic brake (Only for electromagnetic brake equipped model)
Dielectric Strength	Sufficient to withstand the following for one minute. ・Windings — Case AC 1.0 kV 50 Hz ・Case — Windings of electromagnetic brake AC 1.0 kV 50 Hz (Only for electromagnetic brake equipped model)

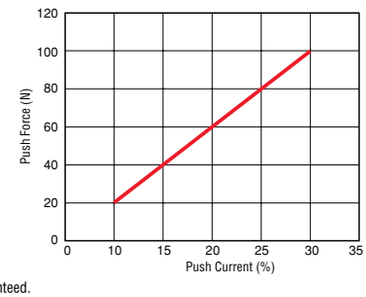
Cylinder/Controller Combinations

Type	Electromagnetic Brake	Model	Cylinder Model	Controller Model
Incremental Type	Not equipped	**EZC6-□CI**	EZC6-□	EZMC36I
	Equipped	**EZC6-□MCI**	EZC6-□M	
Absolute Type	Not equipped	**EZC6-□CA**	EZC6-□	EZMC36A
	Equipped	**EZC6-□MCA**	EZC6-□M	

*The box (□) in the model name and cylinder model name represents the code for stroke length.

Push Force

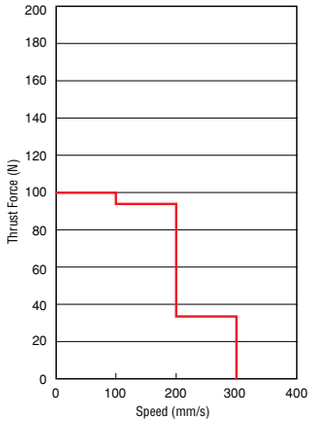
Push force can be set through "Push current setting" in the parameter mode.



Notes:
- The above value is a reference, not guaranteed.
- 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 is applied. Therefore, the cylinder push force must be set so as to accommodate this external force. Measure the push force using an actual load, and set an appropriate push current.

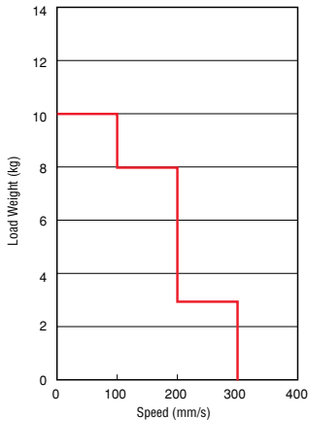
Correlation Diagram of Speed and Thrust Force

●Horizontal Direction/ Vertical Direction



Correlation Diagram of Speed and Load Weight

●Vertical Direction

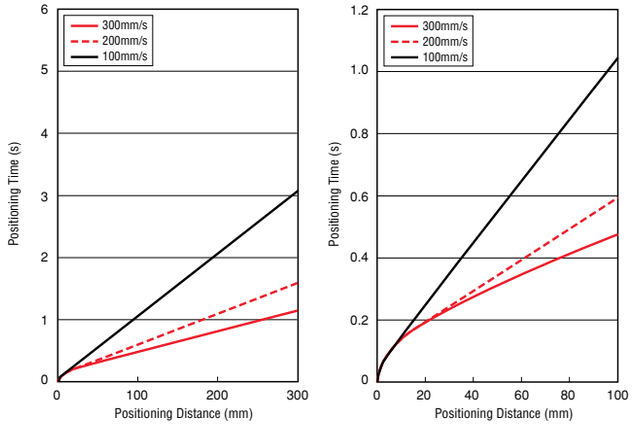


Minimum Positioning Time

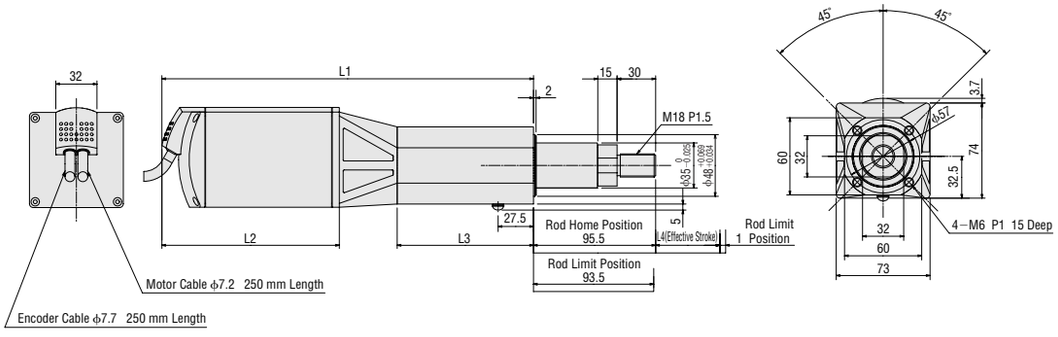
Acceleration: 2 m/s² Starting Speed: 6 mm/s

●Horizontal Direction/ Vertical Direction

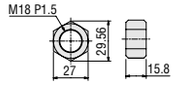
Enlargement of Positioning Distance under 100 mm



Dimensions unit: mm



●Nut (included) 1 piece



Cylinder Model	L1	L2	L3	L4
EZC6-05	289	138	106	50
EZC6-05M	324	173		
EZC6-10	339	138	156	100
EZC6-10M	374	173		
EZC6-20	439	138	256	200
EZC6-20M	474	173		
EZC6-30	539	138	356	300
EZC6-30M	574	173		

EZHC Series

EZHC4

Specifications

Model	Incremental Type	EZHC4A-□I		EZHC4A-□MI	
	Absolute Type	EZHC4A-□A		EZHC4A-□MA	
Motor Type		Stepping Motor with Built-in Rotor-Position Sensor			
Drive Method		Ball Screw			
Electromagnetic Brake		Not equipped		Equipped	
Speed Range	mm/s	～400	～600	～400	～600
Max. Transportable Mass kg	Horizontal Direction*	—	—	—	—
	Vertical Direction	—	—	6.5	4.5
Max. Acceleration m/s²	Horizontal Direction	—		—	
	Vertical Direction	—		2.5	
Max. Thrust Force	N kgf	65 6.5	55 5.5	65 6.5	55 5.5
Push Force	N kgf	65 6.5 (Speed: 6 mm/s or less)			
Max. Holding Brake Force N kgf	Power ON	65 6.5		65 6.5	
	Power OFF	—		—	
	Electromagnetic Brake	—		65 6.5	
Repetitive Positioning Accuracy	mm	±0.02			
Resolution	mm	0.01			
Lead	mm	12			
Stroke	mm	50、100、200、300			
Cylinder Mass (Figure in the parentheses shows the mass of the model with electromagnetic brake.)	kg	**Stroke** **50** : 1.7 (1.9)	**100** : 2.0 (2.2)	**200** : 2.5 (2.7)	**300** : 3.0 (3.2)
Ambient Temperature	℃	0～+40 (Nonfreezing)			

*In a horizontal direction, the value cannot be shown because it varies by frictional resistance of the sliding surface.

●See page 54 for the specification and dimensions of the controller.

General Specifications

Item	Specification
Insulation Resistance	100 MΩ minimum when measured by a DC 500 V megger between the following places. ・Windings — Case ・Case — Windings of electromagnetic brake (Only for electromagnetic brake equipped model)
Dielectric Strength	Sufficient to withstand the following for one minute. ・Windings — Case AC 1.0 kV 50 Hz ・Case — Windings of electromagnetic brake AC 1.0 kV 50 Hz (Only for electromagnetic brake equipped model)

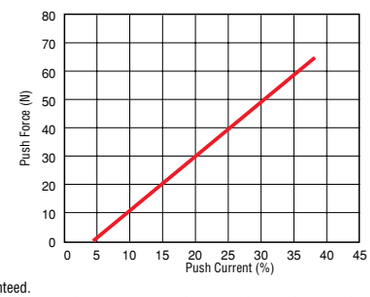
Cylinder/Controller Combinations

Type	Electromagnetic Brake	Model	Cylinder Model	Controller Model
Incremental Type	Not equipped	**EZHC4A-□I**	EZHC4A-□	EZMC13I-A
	Equipped	**EZHC4A-□MI**	EZHC4A-□M	
Absolute Type	Not equipped	**EZHC4A-□A**	EZHC4A-□	EZMC13A-A
	Equipped	**EZHC4A-□MA**	EZHC4A-□M	

*The box (□) in the model name and cylinder model name represents the code for stroke length.

Push Force

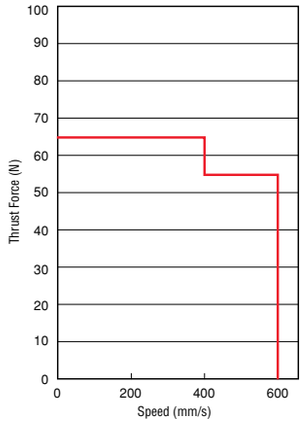
Push force can be set through "Push current setting" in the program mode.



Notes:
- The above value is a reference, not guaranteed.
- 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 is applied. Therefore, the cylinder push force must be set so as to accommodate this external force. Measure the push force using an actual load, and set an appropriate push current.

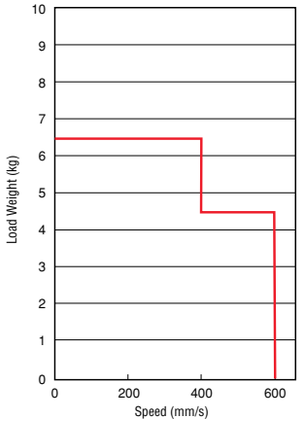
Correlation Diagram of Speed and Thrust Force

●Horizontal Direction/ Vertical Direction



Correlation Diagram of Speed and Load Weight

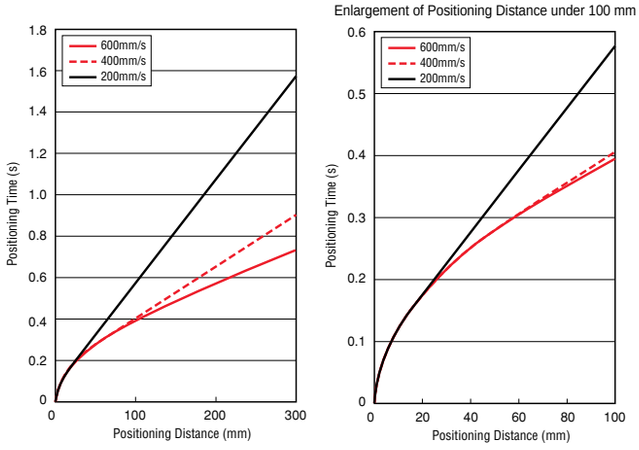
●Vertical Direction



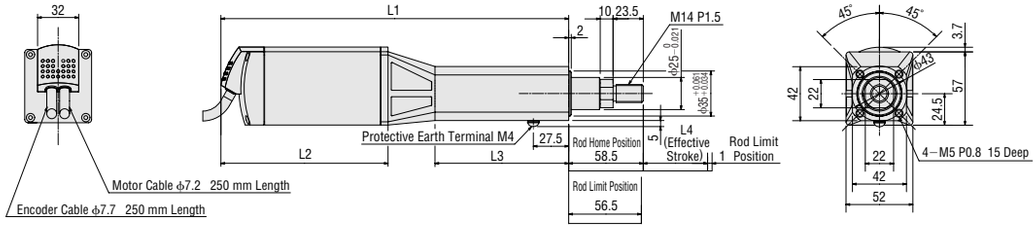
Minimum Positioning Time

Acceleration: 2.5 m/s² Starting Speed: 6 mm/s

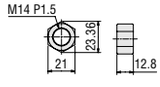
●Horizontal Direction/ Vertical Direction



Dimensions unit: mm



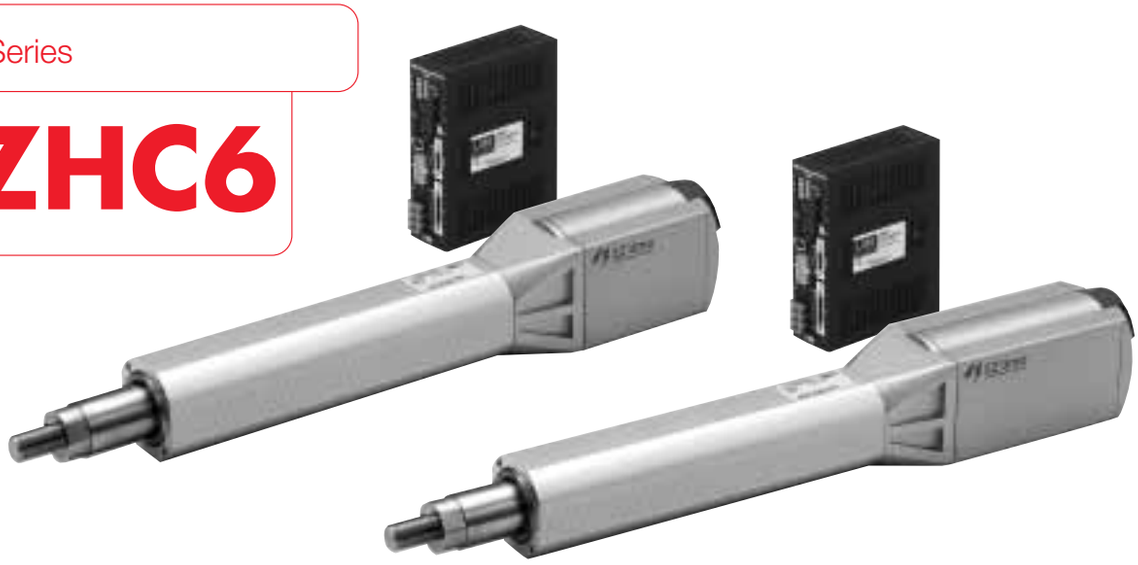
●Nut (included) 1 piece



Cylinder Model	L1	L2	L3	L4
EZHC4A-05	270.5	130	104	50
EZHC4A-05M	300.5	160		
EZHC4A-10	320.5	130	154	100
EZHC4A-10M	350.5	160		
EZHC4A-20	420.5	130	254	200
EZHC4A-20M	450.5	160		
EZHC4A-30	520.5	130	354	300
EZHC4A-30M	550.5	160		

EZHC Series

EZHC6



Specifications

Model	Incremental Type	EZHC6A-□I、EZHC6C-□I		EZHC6A-□MI、EZHC6C-□MI	
	Absolute Type	EZHC6A-□A、EZHC6C-□A		EZHC6A-□MA、EZHC6C-□MA	
Motor Type		Stepping Motor with Built-in Rotor-Position Sensor			
Drive Method		Ball Screw			
Electromagnetic Brake		Not equipped		Equipped	
Speed Range	mm/s	～400	～600	～400	～600
Max. Transportable Mass	kg Horizontal Direction*	—	—	—	—
	kg Vertical Direction	—	—	15	6
Max. Acceleration	m/s² Horizontal Direction	—		—	
	m/s² Vertical Direction	—		2.5	
Max. Thrust Force	N kgf	200 20	73 7.3	200 20	73 7.3
Push Force	N kgf	200 20 (Speed: 6 mm/s or less)			
Max. Holding Brake Force	N kgf Power ON	200 20		200 20	
	N kgf Power OFF	—		—	
	N kgf Electromagnetic Brake	—		200 20	
Repetitive Positioning Accuracy	mm	±0.02			
Resolution	mm	0.01			
Lead	mm	12			
Stroke	mm	50、100、200、300			
Cylinder Mass (Figure in the parentheses shows the mass of the model with electromagnetic brake.)	kg	**Stroke** **50** : 3.3 (3.7)	**100** : 3.7 (4.1)	**200** : 4.6 (5.0)	**300** : 5.6 (6.0)
Ambient Temperature	℃	0～+40 (Nonfreezing)			

*In a horizontal direction, the value cannot be shown because it varies by frictional resistance of the sliding surface.

●See page 54 for the specification and dimensions of the controller.

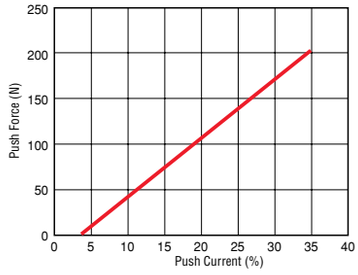
General Specifications

Item	Specification
Insulation Resistance	100 MΩ minimum when measured by a DC 500 V megger between the following places. ・Windings — Case ・Case — Windings of electromagnetic brake (Only for electromagnetic brake equipped model)
Dielectric Strength	Sufficient to withstand the following for one minute. ・Windings — Case AC 1.5 kV 50 Hz ・Case — Windings of electromagnetic brake AC 1.0 kV 50 Hz (Only for electromagnetic brake equipped model)

Push Force

Push force can be set through "Push current setting" in the program mode.

Notes:
- The above value is a reference, not guaranteed.
- 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 is applied. Therefore, the cylinder push force must be set so as to accommodate this external force. Measure the push force using an actual load, and set an appropriate push current.



Cylinder/Controller Combinations

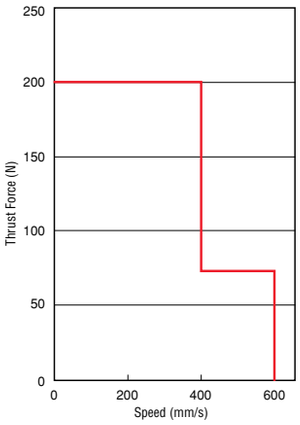
Type	Electromagnetic Brake	Model	Cylinder Model	Controller Model
Incremental Type	Not equipped	**EZHC6A-□I**	EZHC6A-□	EZMC24I-A
		EZHC6C-□I	EZHC6C-□	EZMC12I-C
	Equipped	**EZHC6A-□MI**	EZHC6A-□M	EZMC24I-A
		EZHC6C-□MI	EZHC6C-□M	EZMC12I-C

Type	Electromagnetic Brake	Model	Cylinder Model	Controller Model
Absolute Type	Not equipped	**EZHC6A-□A**	EZHC6A-□	EZMC24A-A
		EZHC6C-□A	EZHC6C-□	EZMC12A-C
	Equipped	**EZHC6A-□MA**	EZHC6A-□M	EZMC24A-A
		EZHC6C-□MA	EZHC6C-□M	EZMC12A-C

*The box (□) in the model name and cylinder model name represents the code for stroke length.

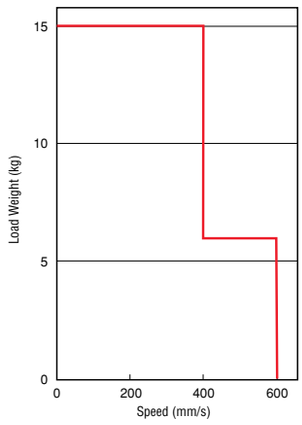
Correlation Diagram of Speed and Thrust Force

●Horizontal Direction/ Vertical Direction



Correlation Diagram of Speed and Load Weight

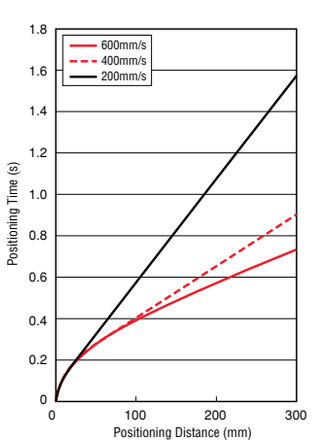
●Vertical Direction



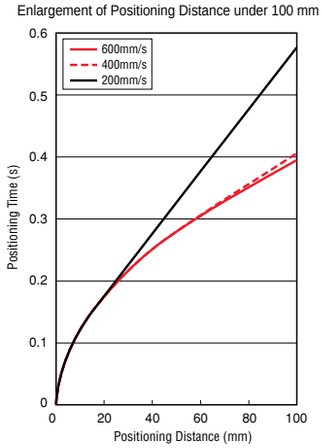
Minimum Positioning Time

Acceleration: 2.5 m/s² Starting Speed: 6 mm/s

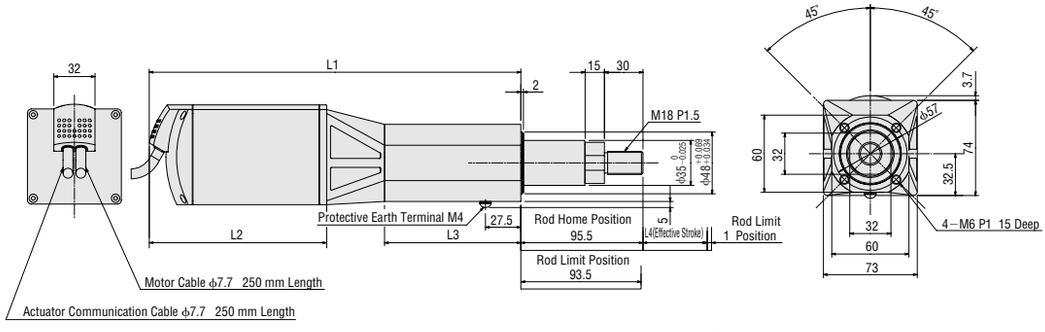
●Horizontal Direction/ Vertical Direction



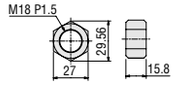
Enlargement of Positioning Distance under 100 mm



Dimensions unit: mm



●Nut (included) 1 piece



Cylinder Model	L1	L2	L3	L4
EZHC6□-05	289	138	106	50
EZHC6□-05M	324	173		
EZHC6□-10	339	138	156	100
EZHC6□-10M	374	173		
EZHC6□-20	439	138	256	200
EZHC6□-20M	474	173		
EZHC6□-30	539	138	356	300
EZHC6□-30M	574	173		

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

EZHP Series

EZHP4

Specifications

Model	Incremental Type	EZHP4A-□I		EZHP4A-□MI	
	Absolute Type	EZHP4A-□A		EZHP4A-□MA	
Motor Type		Stepping Motor with Built-in Rotor-Position Sensor			
Drive Method		Ball Screw			
Electromagnetic Brake		Not equipped		Equipped	
Speed Range	mm/s	～200	～300	～200	～300
Max. Transportable Mass kg	Horizontal Direction*	—	—	—	—
	Vertical Direction	—	—	14	9
Max. Acceleration m/s²	Horizontal Direction	—		—	
	Vertical Direction	—		2.5	
Max. Thrust Force	N kgf	140 14	110 11	140 14	110 11
Push Force	N kgf	140 14 (Speed: 6 mm/s or less)			
Max. Holding Brake Force N kgf	Power ON	140 14		140 14	
	Power OFF	—		—	
	Electromagnetic Brake	—		140 14	
Repetitive Positioning Accuracy	mm	±0.02			
Resolution	mm	0.01			
Lead	mm	6			
Stroke	mm	50、100、200、300			
Cylinder Mass (Figure in the parentheses shows the mass of the model with electromagnetic brake.)	kg	**Stroke** **50** : 1.7 (1.9)	**100** : 2.0 (2.2)	**200** : 2.5 (2.7)	**300** : 3.0 (3.2)
Ambient Temperature	℃	0～+40 (Nonfreezing)			

*In a horizontal direction, the value cannot be shown because it varies by frictional resistance of the sliding surface.

●See page 54 for the specification and dimensions of the controller.

General Specifications

Item	Specification
Insulation Resistance	100 MΩ minimum when measured by a DC 500 V megger between the following places. ・Windings — Case ・Case — Windings of electromagnetic brake (Only for electromagnetic brake equipped model)
Dielectric Strength	Sufficient to withstand the following for one minute. ・Windings — Case AC 1.0 kV 50 Hz ・Case — Windings of electromagnetic brake AC 1.0 kV 50 Hz (Only for electromagnetic brake equipped model)

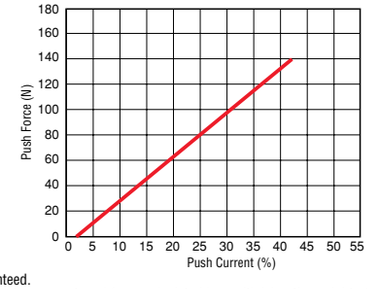
Cylinder/Controller Combinations

Type	Electromagnetic Brake	Model	Cylinder Model	Controller Model
Incremental Type	Not equipped	**EZHP4A-□I**	EZHP4A-□	EZMC13I-A
	Equipped	**EZHP4A-□MI**	EZHP4A-□M	
Absolute Type	Not equipped	**EZHP4A-□A**	EZHP4A-□	EZMC13A-A
	Equipped	**EZHP4A-□MA**	EZHP4A-□M	

*The box (□) in the model name and cylinder model name represents the code for stroke length.

Push Force

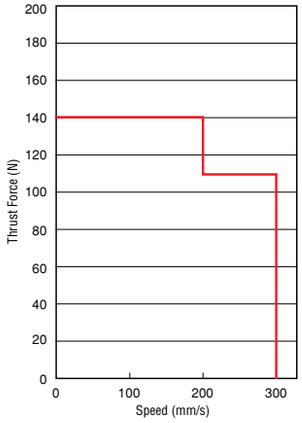
Push force can be set through "Push current setting" in the program mode.



Notes:
- The above value is a reference, not guaranteed.
- 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 is applied. Therefore, the cylinder push force must be set so as to accommodate this external force. Measure the push force using an actual load, and set an appropriate push current.

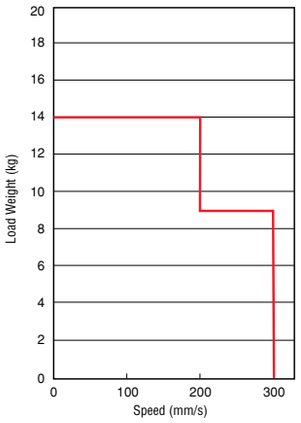
Correlation Diagram of Speed and Thrust Force

●Horizontal Direction/ Vertical Direction



Correlation Diagram of Speed and Load Weight

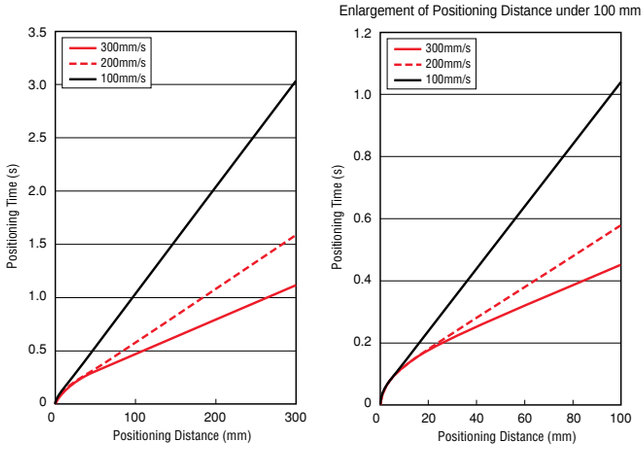
●Vertical Direction



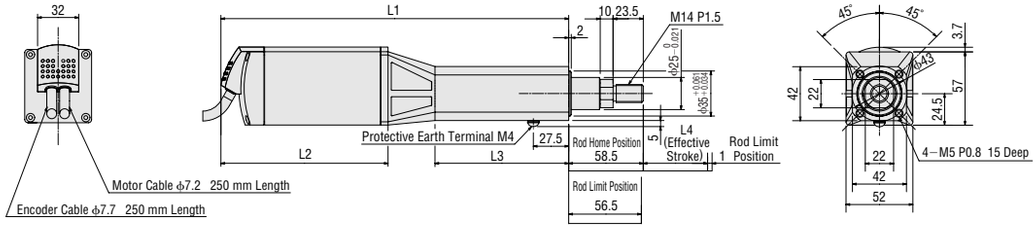
Minimum Positioning Time

Acceleration: 2.5 m/s² Starting Speed: 3 mm/s

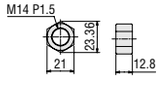
●Horizontal Direction/ Vertical Direction



Dimensions unit: mm



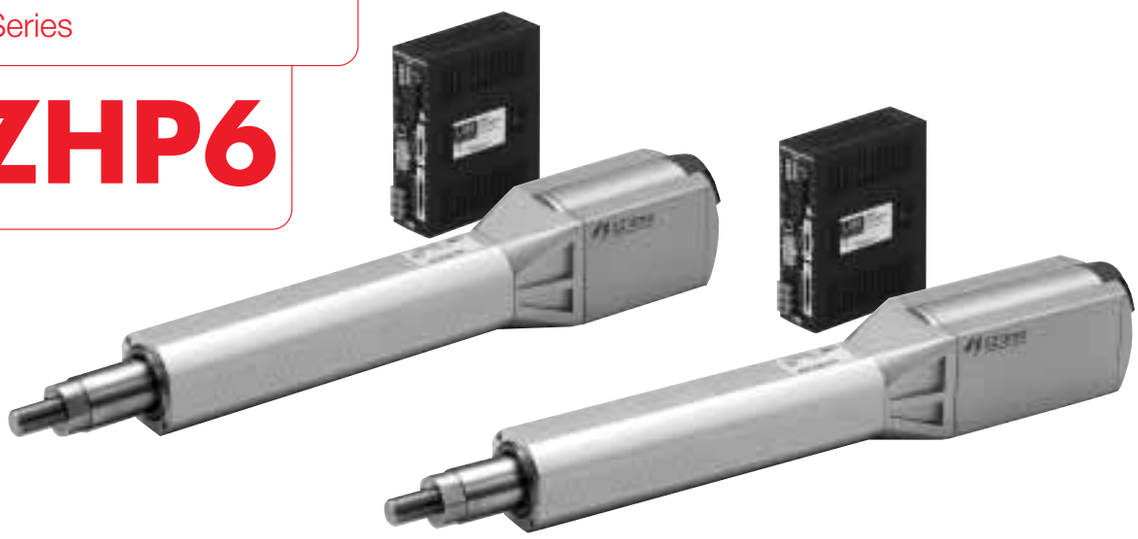
●Nut (included) 1 piece



Cylinder Model	L1	L2	L3	L4
EZHP4A-05	270.5	130	104	50
EZHP4A-05M	300.5	160		
EZHP4A-10	320.5	130	154	100
EZHP4A-10M	350.5	160		
EZHP4A-20	420.5	130	254	200
EZHP4A-20M	450.5	160		
EZHP4A-30	520.5	130	354	300
EZHP4A-30M	550.5	160		

EZHP Series

EZHP6



Specifications

Model		Incremental Type	EZHP6A-□I、EZHP6C-□I		EZHP6A-□MI、EZHP6C-□MI	
		Absolute Type	EZHP6A-□A、EZHP6C-□A		EZHP6A-□MA、EZHP6C-□MA	
Motor Type			Stepping Motor with Built-in Rotor-Position Sensor			
Drive Method			Ball Screw			
Electromagnetic Brake			Not equipped		Equipped	
Speed Range	mm/s		～200	～300	～200	～300
Max. Transportable Mass	kg	Horizontal Direction*	—	—	—	—
		Vertical Direction	—	—	30	12
Max. Acceleration	m/s²	Horizontal Direction	—		—	
		Vertical Direction	—		2.5	
Max. Thrust Force	N kgf		400 40	147 14.7	400 40	147 14.7
Push Force	N kgf		400 40 (Speed: 6 mm/s or less)			
Max. Holding Brake Force	N kgf	Power ON	400 40		400 40	
		Power OFF	—		—	
		Electromagnetic Brake	—		400 40	
Repetitive Positioning Accuracy	mm		±0.02			
Resolution	mm		0.01			
Lead	mm		6			
Stroke	mm		50、100、200、300			
Cylinder Mass (Figure in the parentheses shows the mass of the model with electromagnetic brake.)	kg		**Stroke** **50** : 3.3 (3.7) **100** : 3.7 (4.1) **200** : 4.6 (5.0) **300** : 5.6 (6.0)			
Ambient Temperature	℃		0～+40 (Nonfreezing)			

*In a horizontal direction, the value cannot be shown because it varies by frictional resistance of the sliding surface.

●See page 54 for the specification and dimensions of the controller.

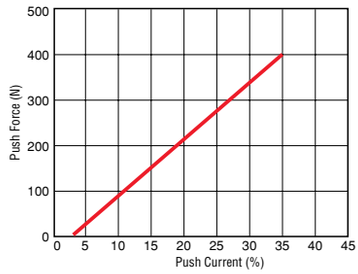
General Specifications

Item	Specification
Insulation Resistance	100 MΩ minimum when measured by a DC 500 V megger between the following places. ・Windings — Case ・Case — Windings of electromagnetic brake (Only for electromagnetic brake equipped model)
Dielectric Strength	Sufficient to withstand the following for one minute. ・Windings — Case AC 1.5 kV 50 Hz ・Case — Windings of electromagnetic brake AC 1.0 kV 50 Hz (Only for electromagnetic brake equipped model)

Push Force

Push force can be set through "Push current setting" in the program mode.

Notes:
・The above value is a reference, not guaranteed.
・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 is applied. Therefore, the cylinder push force must be set so as to accommodate this external force. Measure the push force using an actual load, and set an appropriate push current.



Cylinder/Controller Combinations

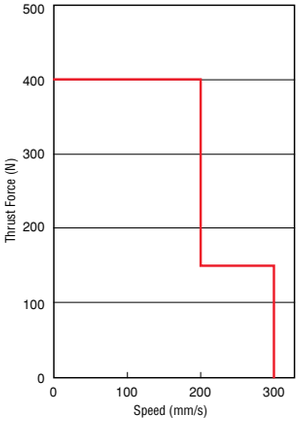
Type	Electromagnetic Brake	Model	Cylinder Model	Controller Model
Incremental Type	Not equipped	**EZHP6A-□I**	EZHP6A-□	EZMC24I-A
		EZHP6C-□I	EZHP6C-□	EZMC12I-C
	Equipped	**EZHP6A-□MI**	EZHP6A-□M	EZMC24I-A
		EZHP6C-□MI	EZHP6C-□M	EZMC12I-C

Type	Electromagnetic Brake	Model	Cylinder Model	Controller Model
Absolute Type	Not equipped	**EZHP6A-□A**	EZHP6A-□	EZMC24A-A
		EZHP6C-□A	EZHP6C-□	EZMC12A-C
	Equipped	**EZHP6A-□MA**	EZHP6A-□M	EZMC24A-A
		EZHP6C-□MA	EZHP6C-□M	EZMC12A-C

*The box (□) in the model name and cylinder model name represents the code for stroke length.

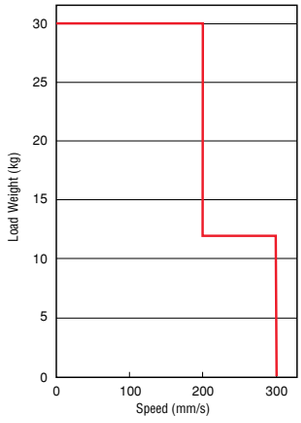
Correlation Diagram of Speed and Thrust Force

●Horizontal Direction/ Vertical Direction



Correlation Diagram of Speed and Load Weight

●Vertical Direction

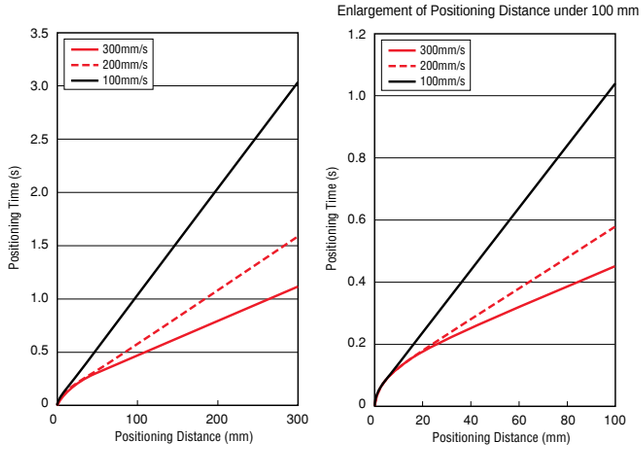


Minimum Positioning Time

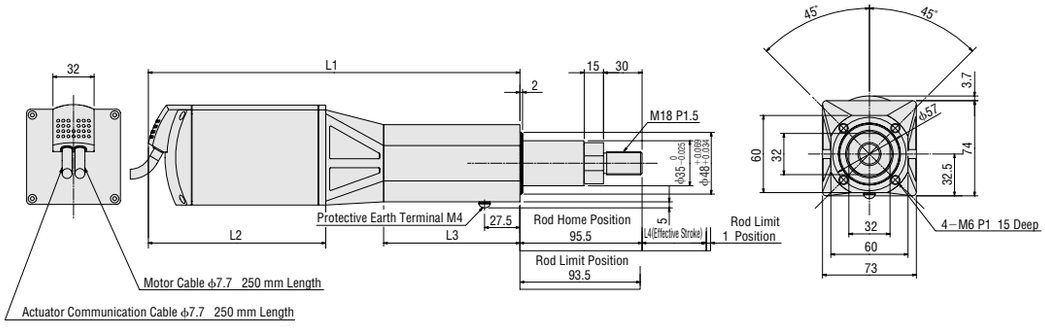
Acceleration: 2.5 m/s² Starting Speed: 3 mm/s

●Horizontal Direction/ Vertical Direction

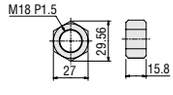
Enlargement of Positioning Distance under 100 mm



Dimensions unit: mm



●Nut (included) 1 piece



Cylinder Model	L1	L2	L3	L4
EZHP6□-05	289	138	106	50
EZHP6□-05M	324	173		
EZHP6□-10	339	138	156	100
EZHP6□-10M	374	173		
EZHP6□-20	439	138	256	200
EZHP6□-20M	474	173		
EZHP6□-30	539	138	356	300
EZHP6□-30M	574	173		

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