

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													
Speed Range	mm/s		~100	~200	~300	~100	~200	~300	Equipped					
Max. Transportable Mass	kg	Horizontal Direction*	—	—	—	—	—	—	—	—	—			
		Vertical Direction	—	—	—	4.5	4	2						
Max. Acceleration	m/s ²	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		Stroke	50 : 1.6 (1.8)	100 : 1.9 (2.1)	200 : 2.4 (2.6)	300 : 2.9 (3.1)	Figure in the parentheses shows the mass of the model with electromagnetic brake.						
Ambient Temperature	°C		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)

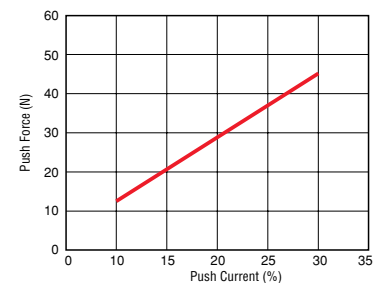
Cylinder/Controller Combinations

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.



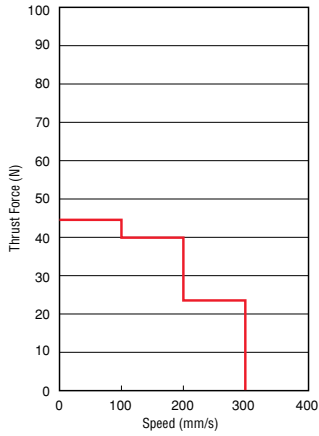
Notes:

• 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.

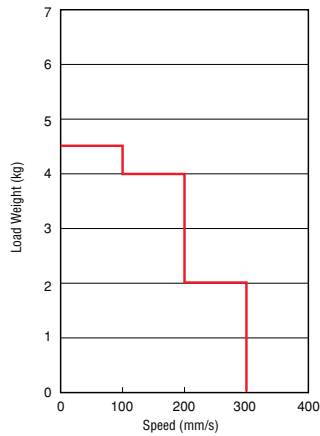
Correlation Diagram of Speed and Thrust Force

● Horizontal Direction/
Vertical Direction



Correlation Diagram of Speed and Load Weight

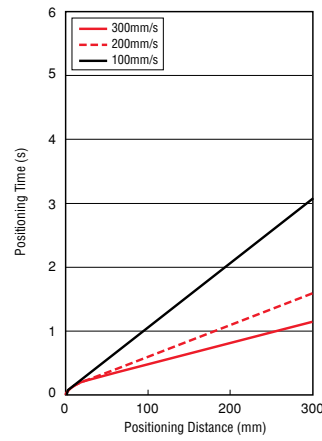
● Vertical Direction



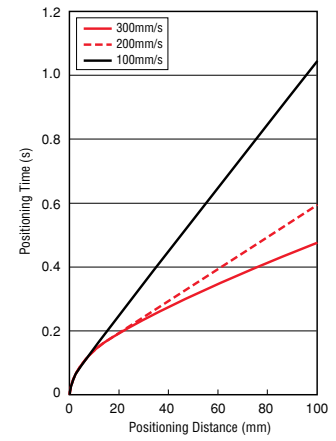
Minimum Positioning Time

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

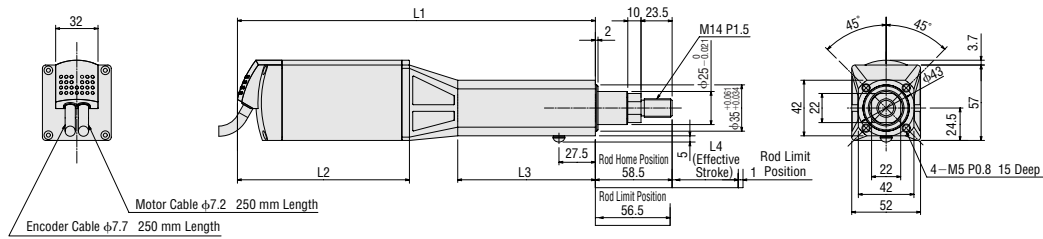
● Horizontal Direction/ Vertical Direction



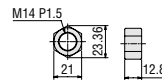
Enlargement of Positioning Distance under 100 mm



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		