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)

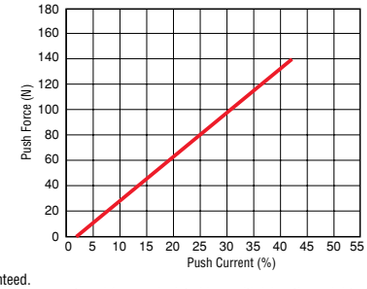
Cylinder/Controller Combinations

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

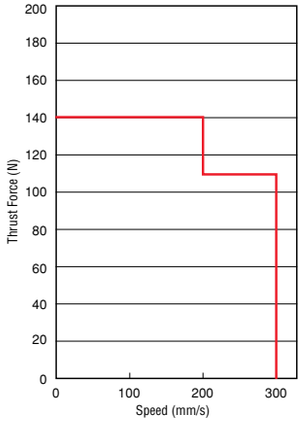
Push force can be set through "Push current setting" in the program mode.



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.

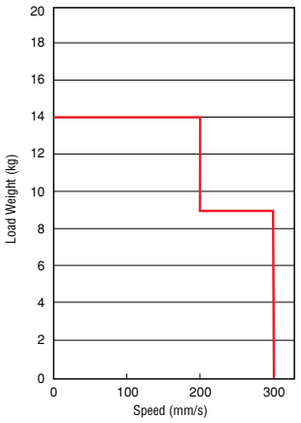
Correlation Diagram of Speed and Thrust Force

●Horizontal Direction/ Vertical Direction



Correlation Diagram of Speed and Load Weight

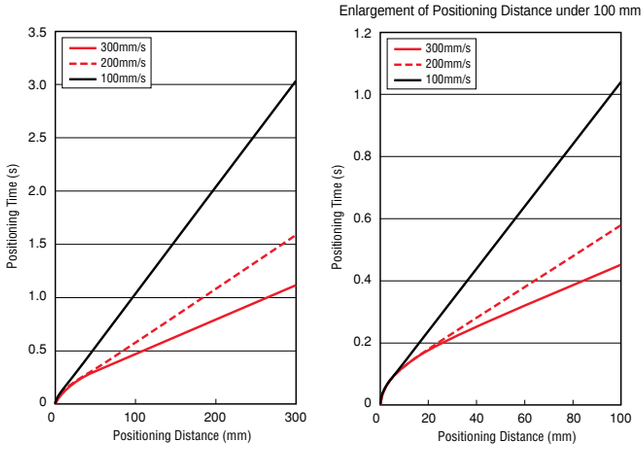
●Vertical Direction



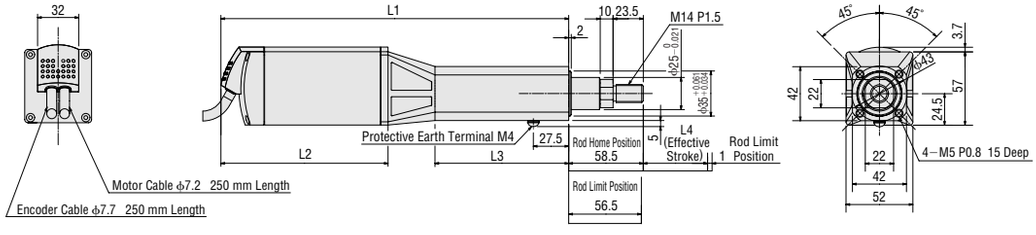
Minimum Positioning Time

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

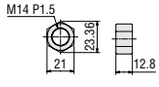
●Horizontal Direction/ Vertical Direction



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		