Electric Cylinders

EAC Series αSTEP AZ Equipped

The motor component incorporates a high-efficiency, energy-saving **αSTEP AZ** Series electric cylinder. In addition to straight-type actuators, reversed motor types with shorter overall lengths are also available.

- Compact, High Strength, for a Wide Variety of Applications
- High Performance Regardless of Operating Conditions
- Easy Belt Replacement (Reversed Motor Type)

See Full Product Details Online
www.orientalmotor.com

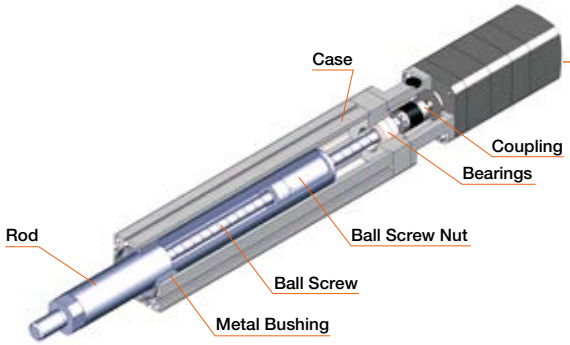
- Manual
- Specifications
- Dimensions
- CAD
- Characteristics
- Connection and Operation

Features

Compact and Powerful!

●Compact, High Thrust Force Cylinders

Using aluminum for the rod, these electric cylinders produce high thrust force despite their compact and lightweight body. The unique structure suppresses vibration to achieve improved acceleration characteristics and high-speed positioning operation.
This illustration shows a straight type without shaft guide.



αSTEP AZ Series

- Battery-free, Absolute Sensor Equipped
- Positioning Information is Available without a sensor
- High Reliability with Closed Loop Control
- High Efficiency Technology Reduces Motor Heat Generation and Saves Energy

Built-in Controller Type

Pulse Input Type

Selection of Electric Cylinders

Type Name	Product Width × Height	Power Supply Voltage	Lead Screw Pitch [mm]	Stroke [mm]	Maximum Speed [mm/s]
				100 200 300 400	100 200 300 400 500 600 700 800
αSTEP AZ Equipped Straight Type Reversed Motor Type	**EAC4** 42 × 42 mm	Single-Phase 100-120 VAC Single-Phase/Three-Phase 200-240 VAC	12	50~300	600
			6	50~300	300
		24/48 VDC	12	50~300	600
			6	50~300	300
	EAC6 60 × 60 mm	Single-Phase 100-120 VAC Single-Phase/Three-Phase 200-240 VAC	12	50~300	600
			6	50~300	300
		24/48 VDC	12	50~300	600
			6	50~300	300
αSTEP AZ Equipped Straight Type with Shaft Guide Cover Reversed Motor Type with Shaft Guide Cover	**EAC4W** 42 × 114 mm	Single-Phase 100-120 VAC Single-Phase/Three-Phase 200-240 VAC	12	50~300	600
			6	50~300	300
		24/48 VDC	12	50~300	600
			6	50~300	300
	EAC6W 60 × 156 mm	Single-Phase 100-120 VAC Single-Phase/Three-Phase 200-240 VAC	12	50~300	600
			6	50~300	300
		24/48 VDC	12	50~300	600
			6	50~300	300

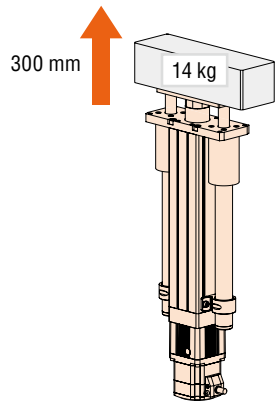
✻The parentheses ( ) indicate the specifications for the reversed motor type.

Capable of a Variety of Movements, Regardless of the Operating Conditions!

●Wide Range of Applications, from Low Speed to High Speed and from Light Loads to Heavy Loads

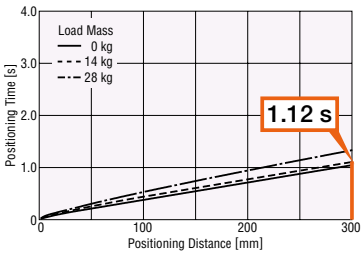
<Product Used>
Product name: **EAC6WE**
Lead Screw Pitch: 6 mm
Power supply input: 230 VAC

When transferring a load of 14 kg over a distance of 300 mm, the positioning time is 1.12 seconds.



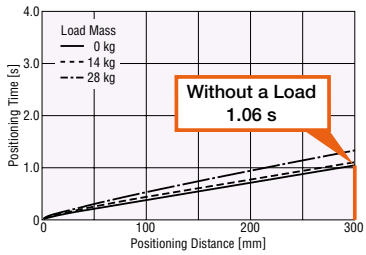
High-Speed With a Heavy Load

Load Mass: 14 kg
Positioning Distance: 300 mm
Positioning Time : 1.12 s
Operating Speed: 300 mm/s
Acceleration: 2.48 m/s² (0.25 G)



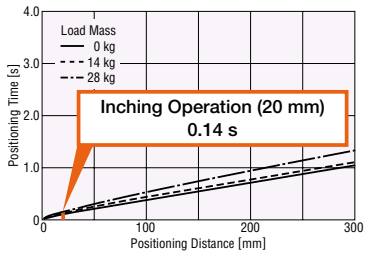
High-Speed With a Light Load

Load Mass: 0 kg
Positioning Distance: 300 mm
Positioning Time : 1.06 s
Operating Speed: 300 mm/s
Acceleration: 5.25 m/s² (0.5 G)



High-Speed During Inching Operation

Load Mass: 14 kg
Positioning Distance: 20 mm
Positioning Time : 0.14 s
Operating Speed: 200 mm/s
Acceleration: 5.3 m/s² (0.5 G)



Positioning Time Calculation Tool Available

A tool is available to calculate the positioning time, operating speed, acceleration, and more — simply by selecting the type of electric cylinder and entering some simple data. The software can be downloaded from the Oriental Motor website.
http://www.orientalmotor.com

	Thrust Force [N]	Push Force [N]	Horizontal Transportable Mass [kg]	Vertical Transportable Mass [kg]	Repetitive Positioning Accuracy [mm]	Reference Page
	~70	100	15	7	±0.02	F-24
	~140 (125)*	200	30	14(12.5)*		
	~70	100	15	7		
	~140 (125)*	200	30	14(12.5)*		
	~200	400	30	15	±0.02	
	~400 (360)*	500	60	30		
	~200	400	30	15		
	~400 (360)*	500	60	30		
	~70	100	15	6	±0.02	
	~140 (125)*	200	30	13(11.5)*		
	~70	100	15	6		
	~140 (125)*	200	30	13(11.5)*		
	~200	400	30	13	±0.02	
	~400 (360)*	500	60	28		
	~200	400	30	13		
	~400 (360)*	500	60	28		