Mach Motion Products

MLA-75 Industrial Linear Actuator

2026 Catalog

Mach Motion Products

• Glossary of Terms

Installation Length

Stroke

Motor Wire

Waterproof Cable Connector

Stainless Steel Fastening Screws

Aluminum Alloy Tube Body

Aluminum Alloy Sealed End Cover

Zinc-Nickel Connectors

Stainless Steel Inner Tube
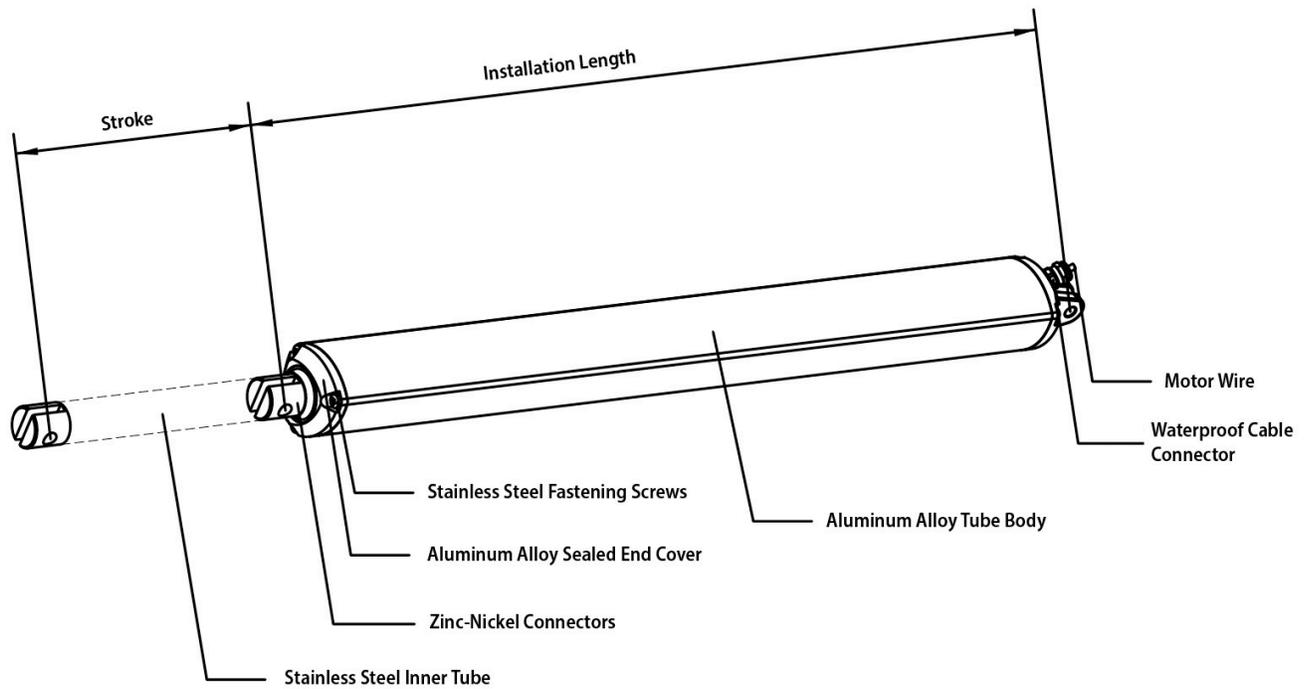
Stroke	How far the rod extends outwards from the body. The difference between fully extended length and fully retracted length. (Customizable)
Installation Length	The length of unit when fully closed. (Customizable)
Front Mounting End	Optional.
Rear Mounting End	Optional.
Dynamic Force	The max. force the actuator can carry while it is moving.
Self-locking	The max. force the actuator can hold when it is stopped.
Weather Protection	IPXX. The first digit: Dust Protection. The Second Digit: Liquids Protection. Please refer to [Table 1.]
Duty Cycle	Continuous working time "a", rest time "b". Duty Cycle is a/(a+b)x100%. Please refer to [Table 1.]
Speed	Includes free-load speed and full load speed.
Manual Override	Can be used to extend or retract the actuator when there is no power in an emergency situation. Check [Table 1] for availability.

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• General Specifications

Color	X Silver	X Black	_ Custom			
Lead Screw	X Acme Screw	X Ball Screw				
Operation Mode	X Electrical	_ Electrical + Hydraulic	_ Electrical + Manual			
Application	X Industrial	_ Furniture	_ Medical			
Operational Temp.	_ 5℃ to 40℃	X -15℃ to 60℃	X -40℃ to 65℃			
Operating Noise	_ ≤45dB	≤50dB	X ≤65dB			
Stroke Range	X 25 to 600mm	X 600 to 1,200mm				
Dynamic Load	_ ≤1,200N	_ ≤2,500N	X ≤5,000N	_ ≤7,000N	_ ≤17,000N	_ ≤20,000N
Duty Cycle	_ 10%	X 20%	_ 25%	X 35%	_ 50%	_ 100%
Motor Type	X Brushed DC	_ Stepper Motor	_ Brushless	_ Servo Motor		
Weather Protection	_ IP20	_ IP43	_ IP54	_ IP65	_ IP66	X IP67
Anti-Corrosion Grade	X NSS 480h					
Input Voltage	X 12VDC	X 24VDC	_ 36VDC	_ 48VDC	_ 110VAC	_ 220VAC

[Table 1]

X Options for MLA-65   _ Available Other Models

• Technical Parameters

| Code	Lead Screw	Max. Dynamic Load	Max. Self-Locking Load	Duty Cycle	Pitch	Speed +/-10% (mm/sec) (*See Note 1)		Max. Stroke At Full Capacity (*See Note 2)
		(N)	(N)	(%)	(mm)	Free Load	Full Load	(mm)
A	ACME Screw	500	800	18	12	40	35.5	1,200
B		1,000	1,200	18	7.5	25	19.5	1,200
C		2,000	2,500	47	12	16.4	12	1,200
D		3,000	3,500	47	7.5	10.2	7.5	1,200
E		3,500	4,200	47	5	7	5	1,200
F		5,000	6,000	47	4	5.7	4.2	600
G	Ball Screw	2,000	2,500	18	5	17	15	1,200
H		5,000	6,000	47	5	7	5.5	600

[Table 2]

*Notes:

1. Measurements are made with actuators in connection with stable power supplies and ambient temperature of 20℃.
2. Many factors affect the "Customizable Maximum Stroke," such as load, speed, and direction of force. Actual application scenarios should be considered. Please contact cs@machmo.com if your required parameters are not listed.

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• Performance

Load vs Current (24VDC)

[Table 4]
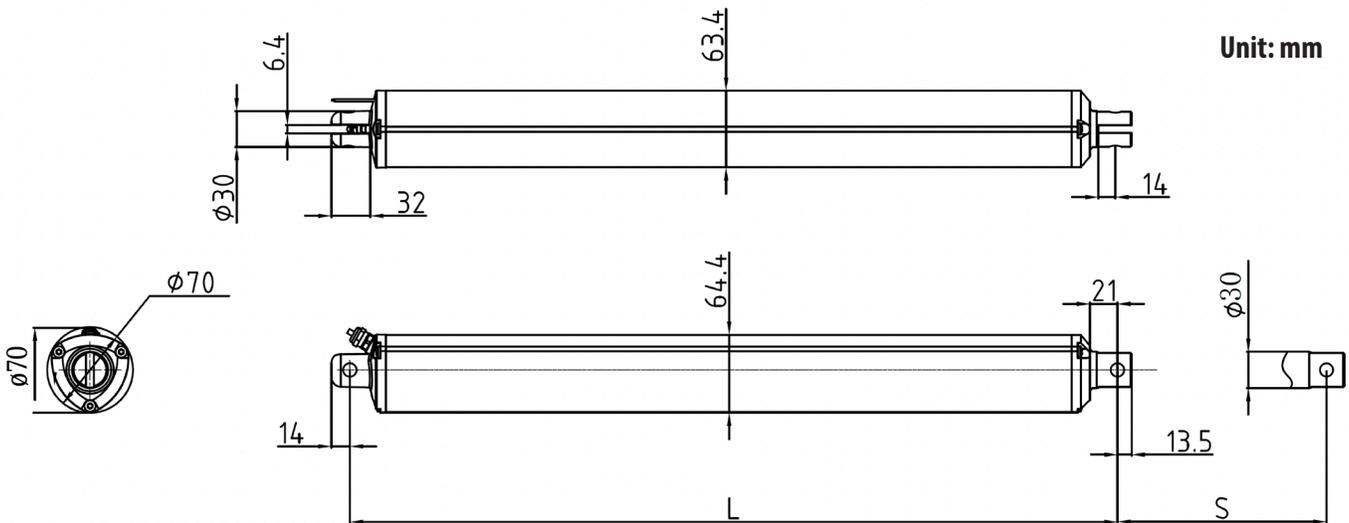
Load vs Speed (24VDC)
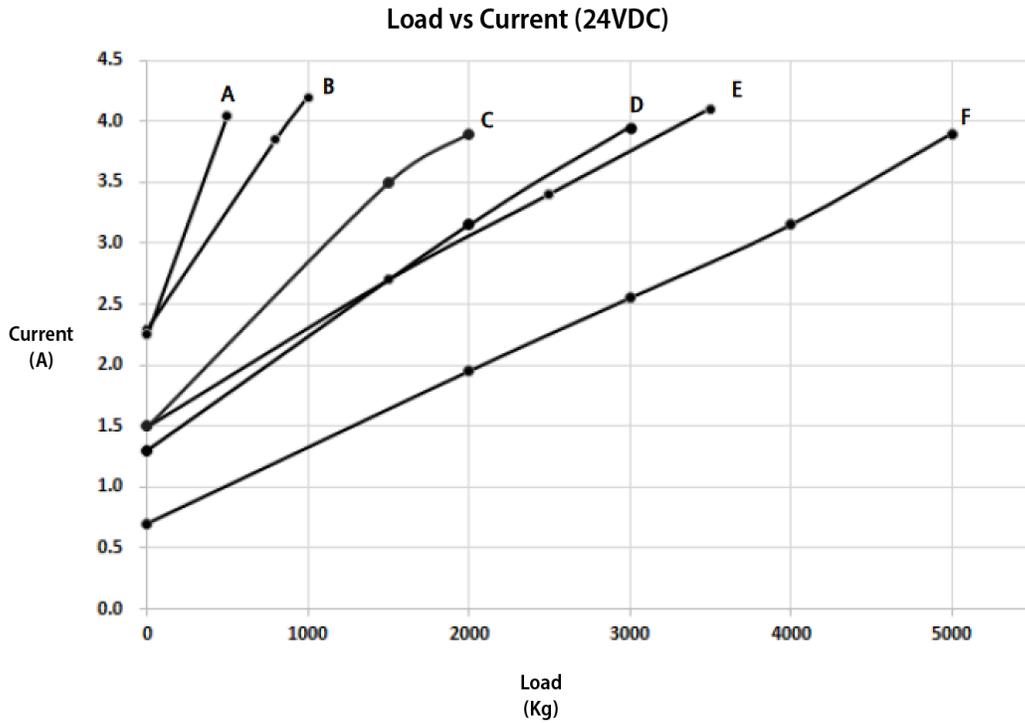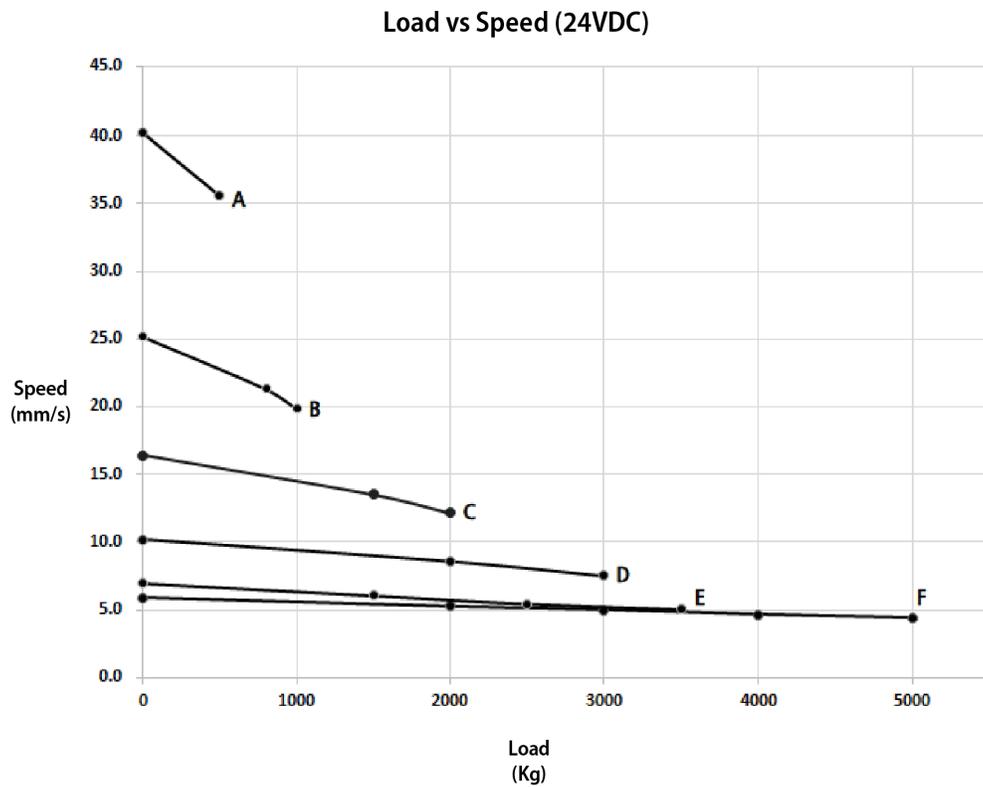
[Table 5]

* Notes:

Motor Voltage is available in 12VDC and 24VDC; the above test data is for 24VDC.

When 12VDC is selected, Current is approximately twice listed 24VDC value while Speed remains unchanged.

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• Product Dimensions

Unit: mm

• Installation Size

A. Basic Installation Length

Code	Installation Length (L) (mm)
A	≥Stroke + 344
B	≥Stroke + 344
C	≥Stroke + 344
D	≥Stroke + 344
E	≥Stroke + 344
F	≥Stroke + 315
G	≥Stroke + 344
H	≥Stroke + 344

[Table 6.1]

B. Stroke vs. Installation Length

Stroke (S) (mm)	Installation Length (L) (mm)
30 - 200	+ 0
201 - 599	+ 50
≥600	+100

[Table 6.2]

C. Connectors vs. Installation Length

| Front/ Rear Connector	Installation Length (L) (mm)
F01	+ 0
F02	+ 40
R01	+ 0
R02	+ 0

[Table 6.3]

Note: Installation dimensions of the system parts connecting with actuators may affect the above values.
Please contact cs@machmo.com if your required parameters are not listed as customization is available.

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• Mounting Ends

1. Please contact cs@machmo.com if none of the options below meet your requirements.

Front Mounting End	
F01	
F02	

[Table 7]

Rear Mounting End	
R01	
R02	
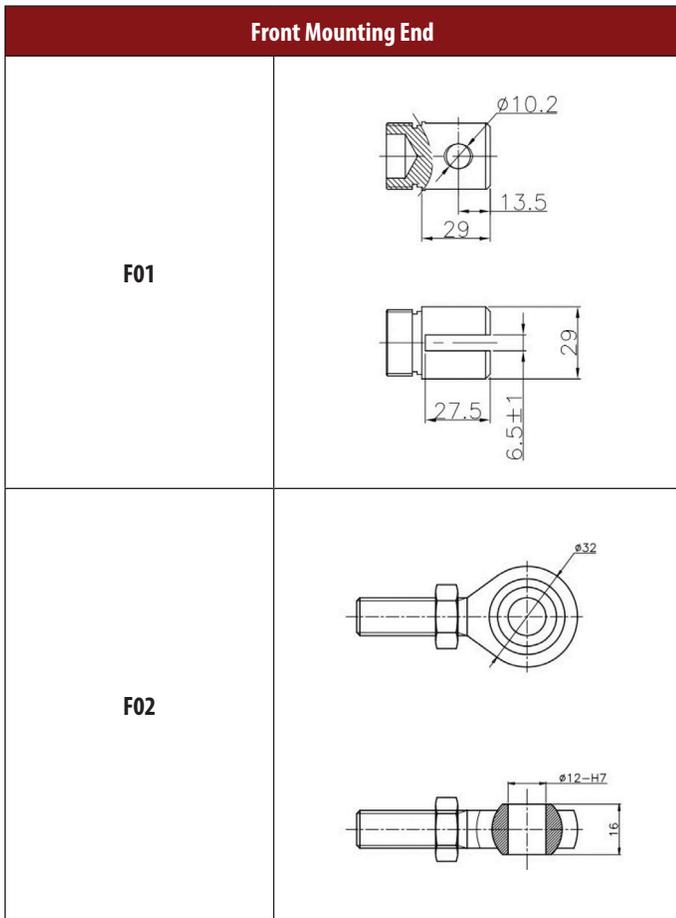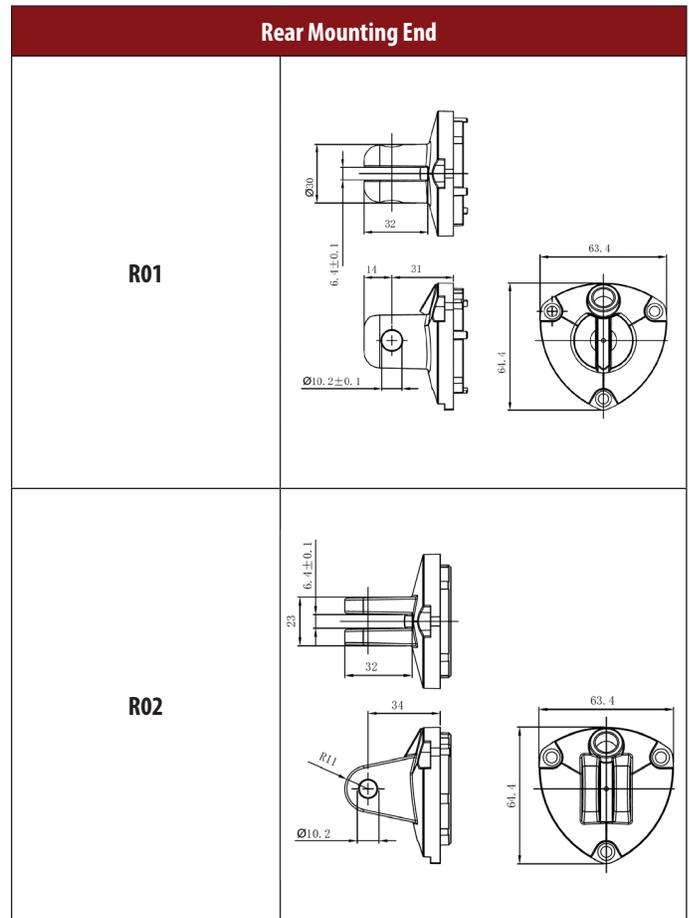
[Table 8]

• Color

Color	Code
Silver	1
Black	2

• Cable

Cable Length (mm)	Code
500	1
Customized	X

Cable Connector	Code
Tin-plated Bare Wire	1
Customized	X

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• Product Inquiry Table

Selection

Application

Specification	Available Options	
Transmission Code	See [Table 3]	
Stroke (mm)	Please contact cs@machmo.com if required stroke is out of ranges listed.	
Voltage	12VDC	24VDC
Installation Length (mm)	See [Tables 6.1 - 6.3]	
Front Mounting End	F01	F02
Rear Mounting End	R01	R02
Color	1 = Silver	2 = Black
Cable Length	1 = 500mm	X = Customized
Connector	0 = Tinned Bare Wires	X = Customized
Working Temperature	1 = -15℃ ~ 65℃	1 = -40℃ ~ 65℃
Working Frequency	Estimated Work Cycles Per Day	Estimated Working Days per Year
End Use	Indoor or Outdoor?	