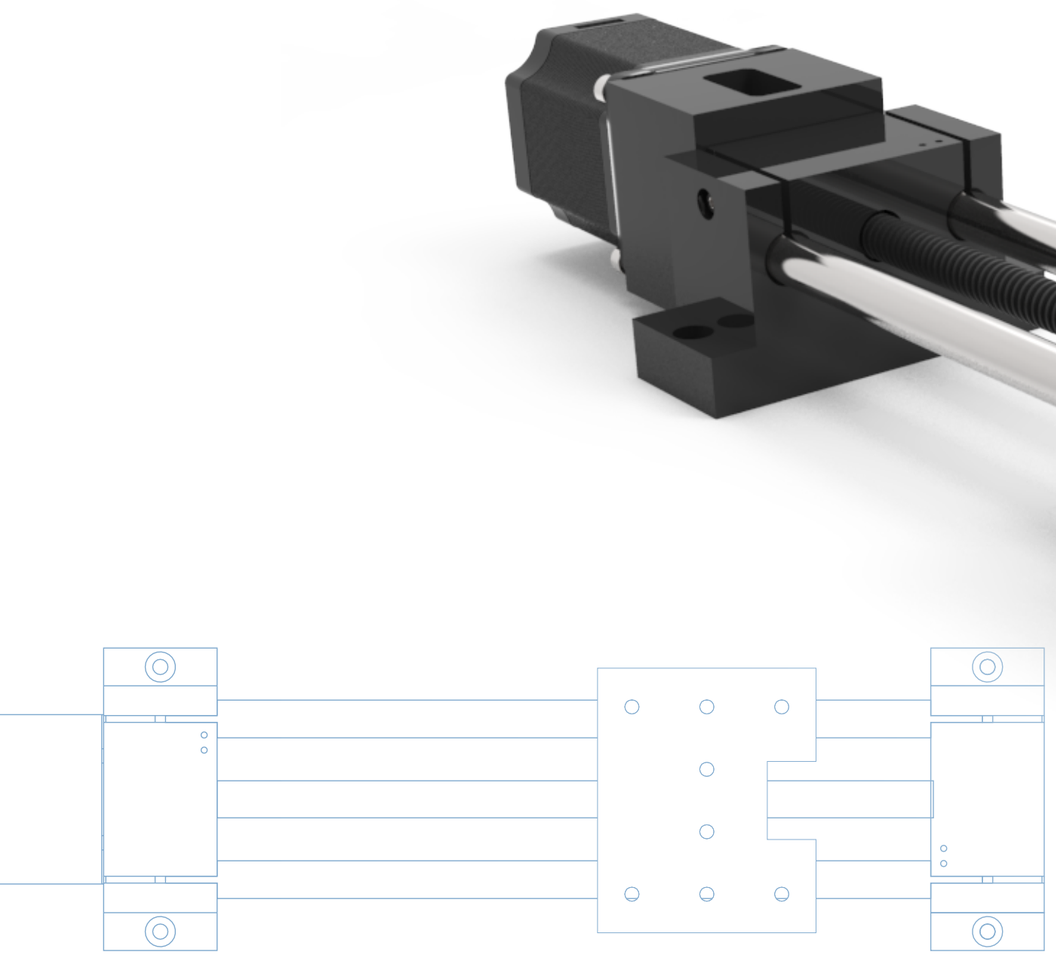

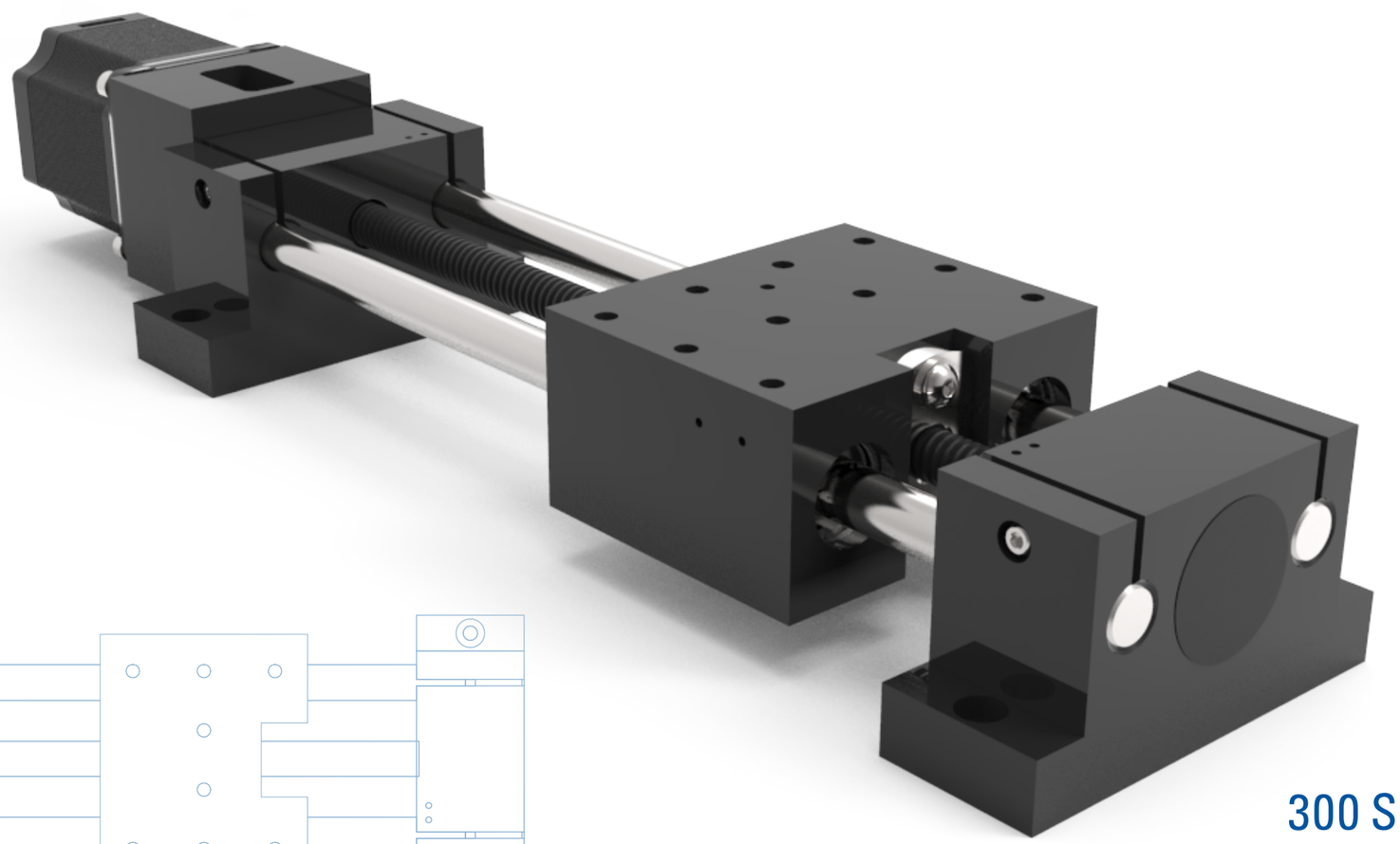

300 Series Linear Stages

HELIX™
LINEAR TECHNOLOGIES

Partners

ASSOCIATION FOR HIGH TECHNOLOGY DISTRIBUTION AHTD

EPTDA Member

PTDA Member

Certifications

ISO 9001:2015 with Design Certificate No. 14.339.2

ITAR Registered

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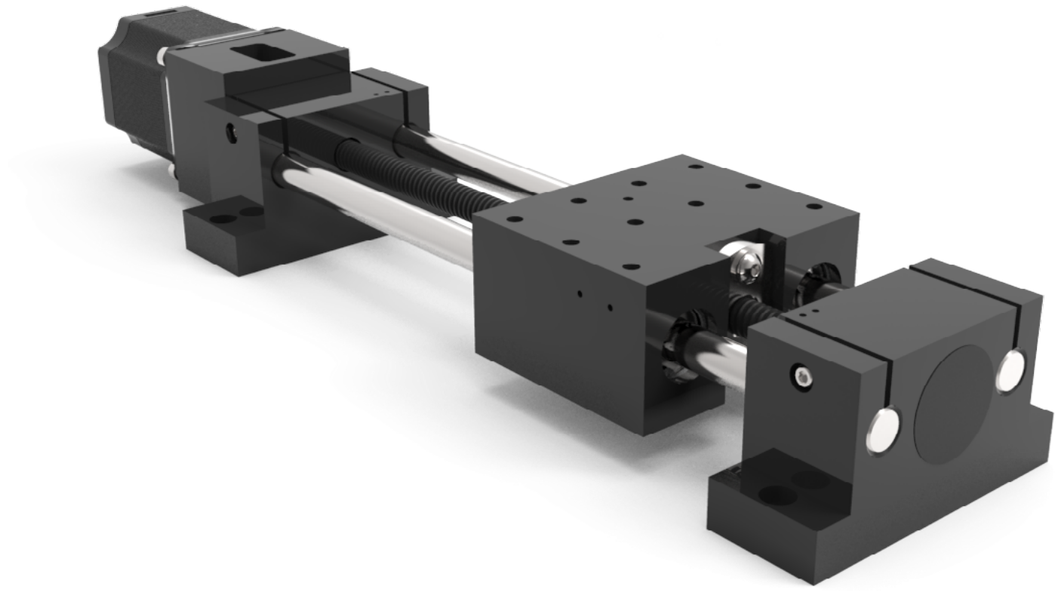

Market Segments Served

- Medical & Diagnostic
- Aerospace
- Packaging
- Automotive
- Electronics
- Transportation
- Patient Handling
- Entertainment
- Semiconductors
- Military and Defense
- Factory Automation
- Pulp & Paper
- Steel
- Chemical
- Agriculture/Food Handling
- Tire Manufacture

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Helix Linear Technologies, Inc., Beachwood, Ohio USA

Company

Helix Linear Technologies is a global supplier in the medical device, life science, security, semiconductor, ærospace, electromechanical, and defense industries. Leading the linear motion industry by manufacturing the highest quality linear actuation solutions in the world, we focus on helping our customers be productive and profitable. Our innovative product design solves real-world linear motion issues and builds a foundation for long term success.

Culture

Our culture is rooted in teamwork and consists of smart, happy, and competitive professionals focused on manufacturing innovative products and delivering precise electromechanical linear motion solutions. We are in the people business, as well as the product business. Our talented employees make and sell our products, and our extraordinary scope of teamwork keeps our company healthy.

History

Helix Linear Technologies was founded in 2011 to meet the demand for high-quality lead screws in the growing electromechanical actuation industry. Our rapid growth has included the addition of end-to-end linear actuator solutions, providing integrated solutions.

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300 Series
Part Number Configuration Guide

3 11 - S - N - 050 - 7.25 - E200 A - S

300 Series

Motor Size (NEMA)
- 11
- 17
- 23

Motor Style
- S = Single Stack
- D = Double Stack
- PS = Pluggable Smart Motor
- M125 = M12 Connector Smart Motor

Nut Type
- BN = Ball Nut
- N = Freewheeling
- A = Anti-Backlash

Lead Code

See table on right

Guide Rod Length in Inches

See table on right

Encoder
- ER = encoder-ready
- E200 = 200 counts per rev
- E500 = 500 counts per rev
- E1000 = 1000 counts per rev
- E2000 = 2000 counts per rev
- 00 = no encoder

Encoder Position (see below)
- A = Position A
- B = Position B

End Sensors
- S = Optical Sensors
- 00 = No Sensors

Guide Rod Length

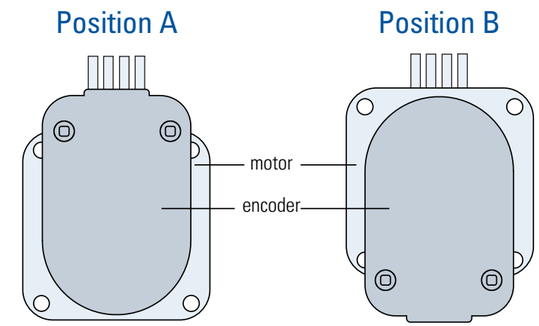
Travel		Guide Rod Length in Inches		
in	mm	NEMA 11	NEMA 17	NEMA 23
1.00	25.4	4.25	5.25	7.00
2.00	50.8	5.25	6.25	8.00
3.00	76.2	6.25	7.25	9.00
4.00	101.6	7.25	8.25	10.00
5.00	127.0	8.25	9.25	11.00
6.00	152.4	9.25	10.25	12.00
7.00	177.8	10.25	11.25	13.00
8.00	203.2	11.25	12.25	14.00
9.00	228.6	12.25	13.25	15.00
10.00	254.0	13.25	14.25	16.00
11.00	279.4	-	15.25	17.00
12.00	304.8	-	16.25	18.00
13.00	330.2	-	17.25	19.00
14.00	355.6	-	18.25	20.00
15.00	381.0	-	19.25	21.00
16.00	406.4	-	20.25	22.00
17.00	431.8	-	21.25	23.00
18.00	457.2	-	22.25	24.00
19.00	482.6	-	-	25.00
20.00	508.0	-	-	26.00
21.00	533.4	-	-	27.00
22.00	558.8	-	-	28.00
23.00	584.2	-	-	29.00
24.00	609.6	-	-	30.00

Lead Codes

Lead Code	Lead		Nut Availability		
	in	mm	11	17	23
025	.025	0.6	●	●	-
039	.039	1.0	○	○	◌
078	.079	2.0	○	○	◌
100	.100	2.5	●	●	●
200	.200	5.1	●	●	●
250	.250	6.4	●	●	●
500	.500	12.7	●	●	●
999	1.000	25.4	●	●	●

○ All nut types
◌ Ball Nuts only
● Lead Screw Nuts only

Encoder Positions



24hr QUOTES
3D CAD DOWNLOAD

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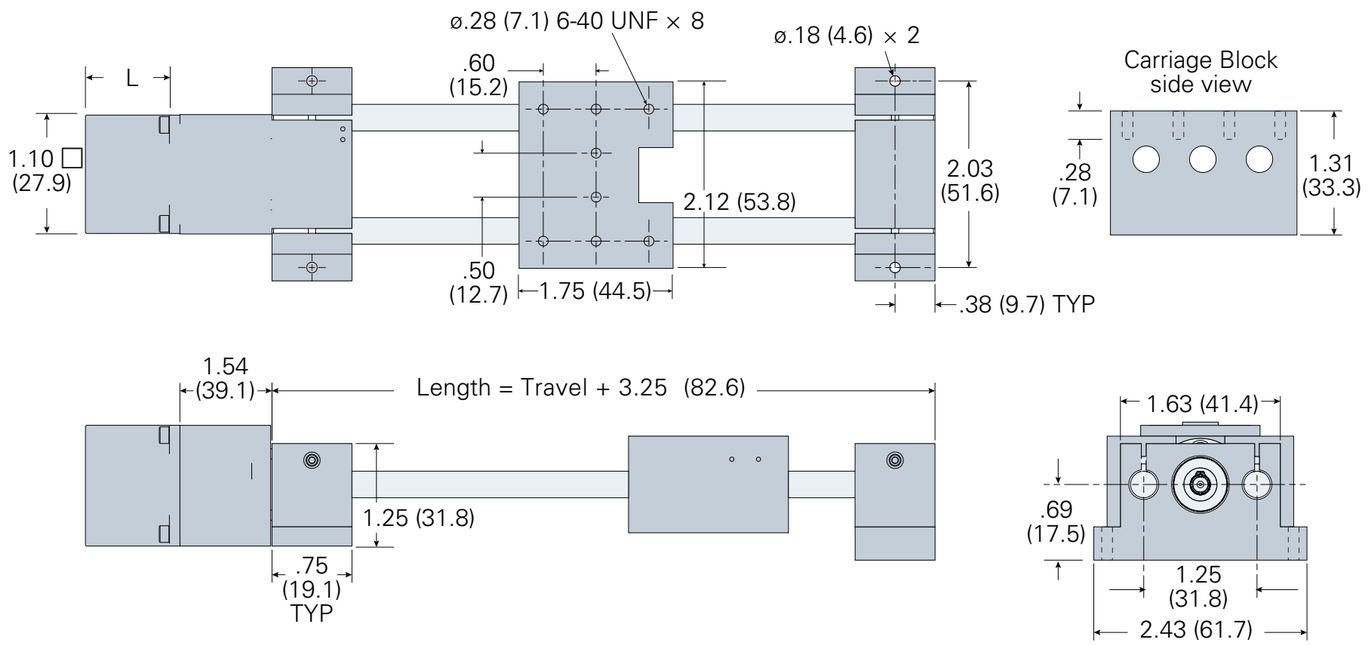
300 Series
NEMA 11



Guide Rod Length

Travel		Rod Length in Inches
in	mm	
2.00	50.8	5.25
4.00	101.6	7.25
6.00	152.4	9.25
8.00	203.2	11.25
10.00	254.0	13.25

Lead Codes

Lead Code	Lead		
	in	mm	
039	.039	1.0	○
100	.100	2.5	●
250	.250	6.4	●
999	1.000	25.4	●

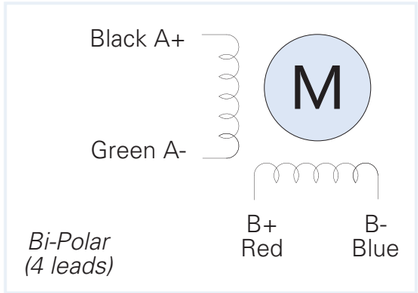
○ All Nut Types
● Lead Screw Nuts only

Motor Specifications

- 24 VDC
- Bipolar Wiring
- 1.8° Step Angle
- Insulation Resistance: 20 MΩ
- Temperature Rise: 135° F

Motor Length	Current	Resistance/ Phase	Inductance/ Phase	Holding Torque	L	
	A	Ω	mH	N-m	in	mm
Single Stack	0.67	5.6	4.2	0.060	1.260	32
Double Stack	0.67	6.8	4.9	0.095	1.772	45

Wiring Diagram



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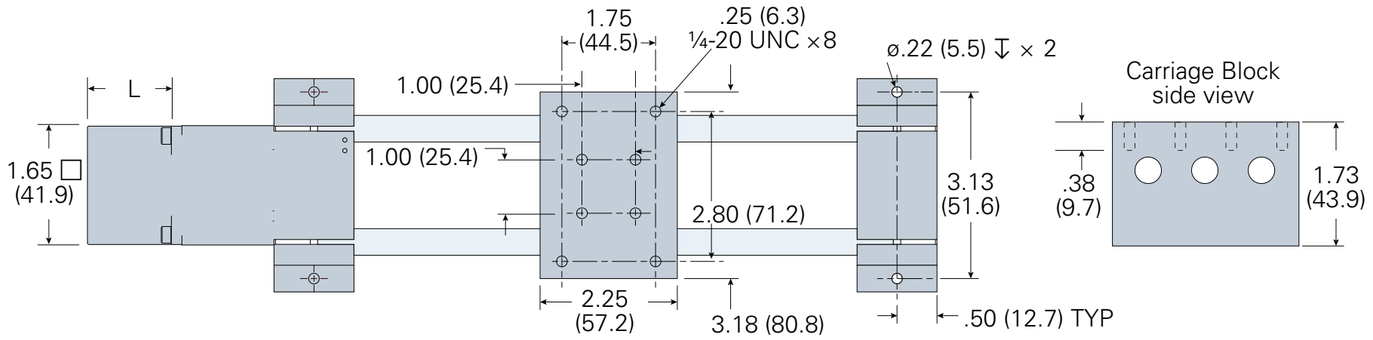

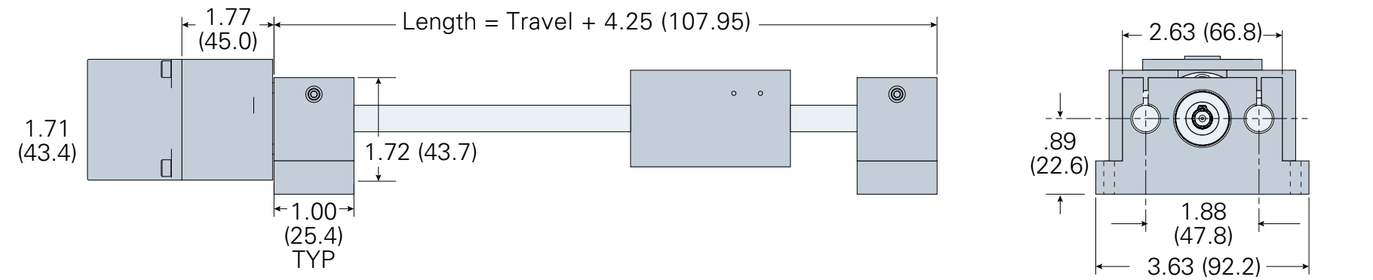

Guide Rod Length

Travel		Rod Length
in	mm	in Inches
1.00	25.4	5.25
2.00	50.8	6.25
3.00	76.2	7.25
4.00	101.6	8.25
5.00	127.0	9.25
6.00	152.4	10.25
7.00	177.8	11.25
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12.00	304.8	16.25
13.00	330.2	17.25
14.00	355.6	18.25
15.00	381.0	19.25
16.00	406.4	20.25
17.00	431.8	21.25
18.00	457.2	22.25

Lead Codes

Lead Code	Lead		
	in	mm	
025	.025	0.6	●
039	.039	1.0	○
078	.079	2.0	○
100	.100	2.5	●
200	.200	5.1	●
250	.250	6.4	●
500	.500	12.7	●
999	1.000	25.4	●

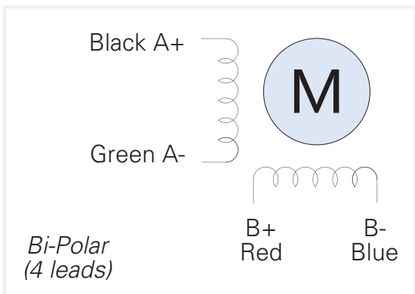
○ All Nut Types
● Lead Screw Nuts only

Motor Specifications

- 24 VDC
- Bipolar Wiring
- 1.8° Step Angle
- Insulation Resistance: 20 MΩ
- Temperature Rise: 135° F

Motor Length	Current	Resistance/ Phase	Inductance/ Phase	Holding Torque	L	
	A	Ω	mH	N-m	in	mm
Single Stack	1.33	2.1	2.5	0.22	1.299	33
Double Stack	1.68	1.65	2.8	0.44	1.850	47

Wiring Diagram



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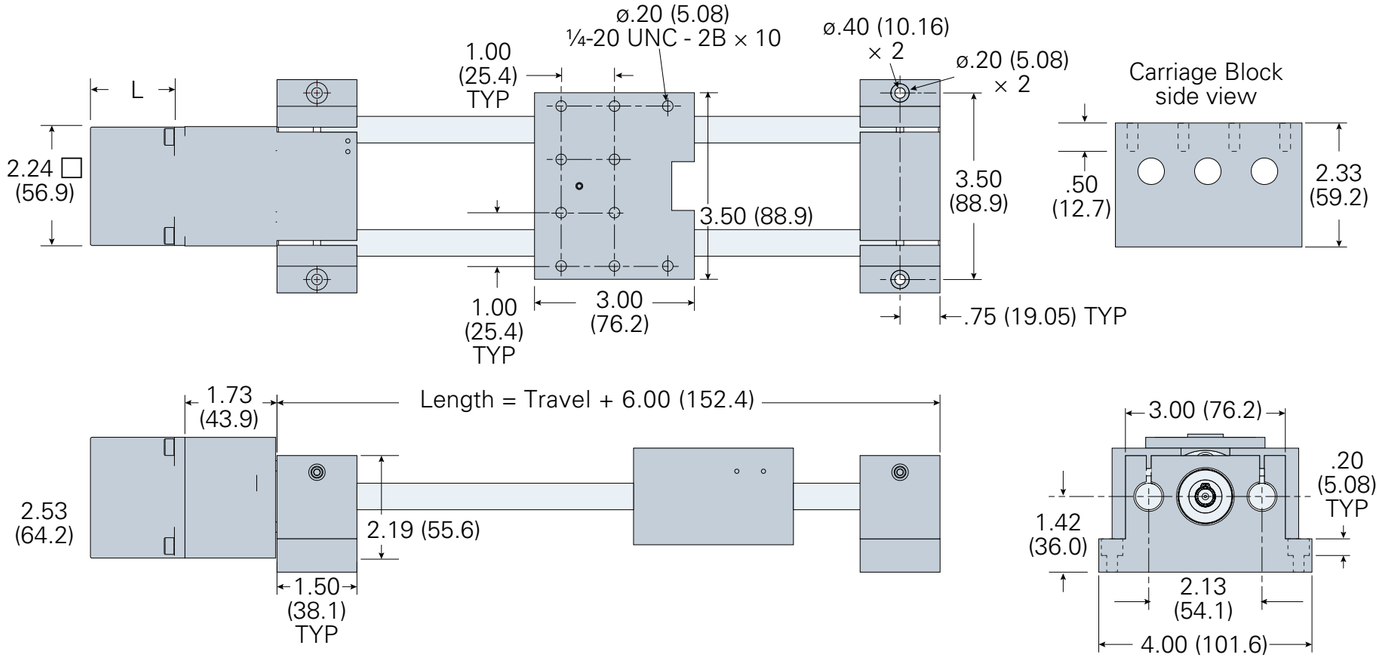

Motor Specifications

- 24 VDC
- Bipolar Wiring
- 1.8° Step Angle
- Insulation Resistance: 20 MΩ
- Temperature Rise: 135° F

Motor Length	Current	Resistance/ Phase	Inductance/ Phase	Holding Torque	L	
	A	Ω	mH	N-m	in	mm
Single Stack	2.8	0.7	1.4	0.55	1.77	41
Double Stack	2.8	0.9	2.5	1.26	2.52	56

Guide Rod Length

Travel		Rod Length in Inches
in	mm	
1.00	25.4	7.00
2.00	50.8	8.00
3.00	76.2	9.00
4.00	101.6	10.00
5.00	127.0	11.00
6.00	152.4	12.00
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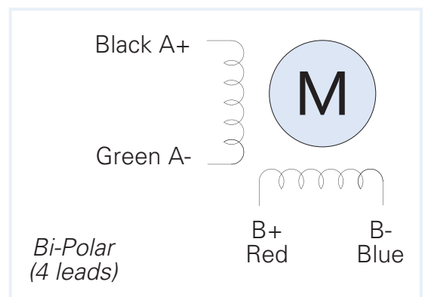
22.00	558.8	28.00
23.00	584.2	29.00
24.00	609.6	30.00

Lead Codes

Lead Code	Lead		
	in	mm	
039	.039	1.0	○
078	.079	2.0	○
100	.100	2.5	●
200	.200	5.1	●
250	.250	6.4	●
500	.500	12.7	●
999	1.000	25.4	●

○ Ball Nuts Only
● Lead Screw Nuts only

Wiring Diagram



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