

17AV Series Linear Actuators

FEATURES

- NEMA 17 (42mm Square)
- Anti-Backlash and Self-Compensating Nut Option
- Nuts and Bushings can be Mounted on Either Front or Back of Motor
- Zero Backlash Operation
- Long life, Predictable Operation
- No Axial or Radial Play



DESCRIPTION

Anaheim Automation 17AV leadscrew step motors are the most versatile linear positioning motors on the market. They are available in a thru-screw with a variety of drive nut and support bushing options. The 17AV motors are robust and can be easily configured to solve the most difficult application problems. Integration of a leadscrew with a motor saves space by eliminating components and reduces cost. While many standard configurations are available, custom modifications for OEM customers are available.

BUILD A PART NUMBER

17AV101 - AX - 06 - AB

Motor Winding		Lead Screw Pitch (in)		Lead Screw Length "L" (in)		Front Attachment		Rear Attachment	
01	0.5A	A	0.050"	06	6"	A	Anti-Backlash Nut	B	Bushing
02	1.0A	B	0.100"	12	12"	S	Standard Nut	C	Cover Only
03	1.5A	D	0.250"					E	Encoder
								N	No Extension

EXAMPLE:

17AV103AX06-AB = NEMA 17 Frame, 1 Stack, 1.5A Motor, 0.050" screw pitch resolution, 6" screw length, Anti-Backlash Nut on the front of the motor along with a Bushing on the rear.

Note: See *Accessories* on our website for information on optional encoder and/or connector adders

MOTOR TYPES



17 AV
Anti-Backlash



17 AV
Standard Nut



17 AV
Centering Bushing

L010785

Model Number	Series Voltage (V)	Series RMS Current (A)	Series Resistance (ohms)	Power (W)	Series Inductance (mH)	Rotor Inertia (oz/sec)	Number of Leads	Motor Weight (oz)	Length (in)
17AV101	7.6	0.5	15.00	3.7	17.0	4.96×10^{-4}	4	8.0	1.40
17AV102	3.8	1.0	3.60	3.6	4.5	4.96×10^{-4}	4	8.0	1.40
17AV103	2.5	1.5	1.67	3.8	1.7	4.96×10^{-4}	4	8.0	1.40

Screw Pitch Options						
Screw Pitch	Screw Pitch (in)	Static Force (lb)	Dynamic Force (lb)	Travel per Full Step (in)	Travel per Microstep (in)	Positioning Accuracy (in/in)
A	0.050	82	70	0.00025	$.98 \times 10^{-6}$	0.0004
B	0.100	82	50	0.00050	1.95×10^{-6}	0.0004
D	0.250	82	28	0.00125	4.88×10^{-6}	0.0004

Anaheim Automation welcomes the opportunity to customize 17AV motors for our OEM customers to better meet application requirements or supply a drop-in solution. Here are just a few options we have had experience with:

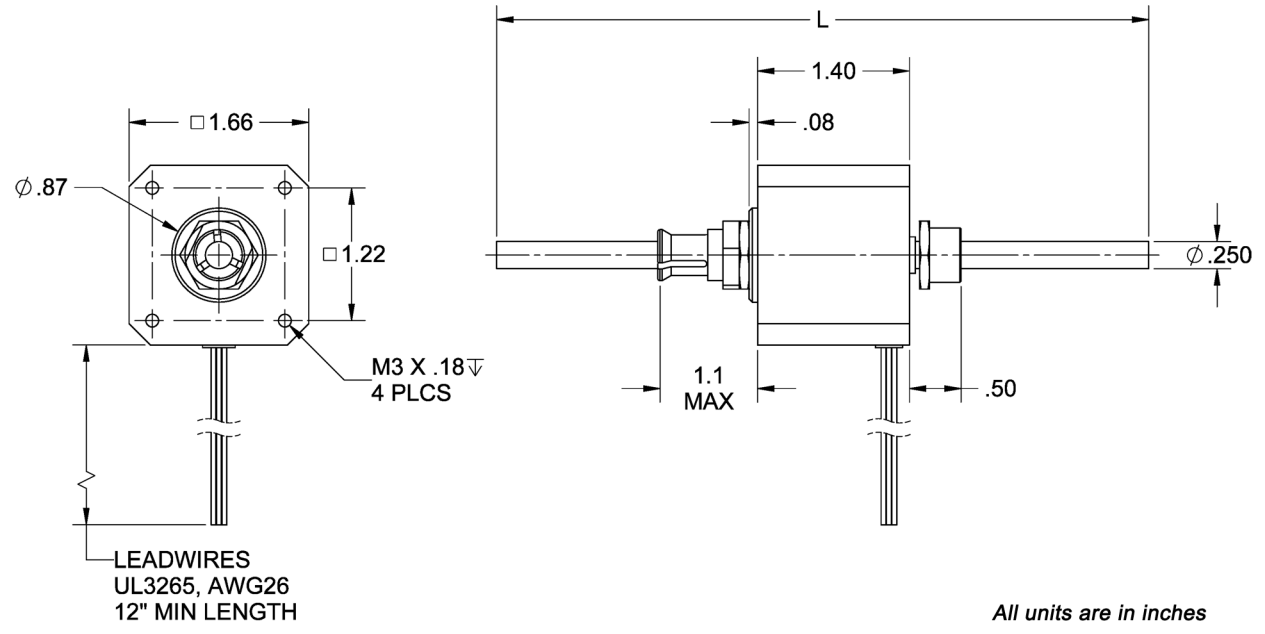
- Custom Motor Windings
- Alternate Lead Configurations - 6 lead, 8 lead
- Longer Motor Stack Lengths
- Custom Cabling and/or Connectors
- Encoder Feedback
- Alternate Screw Leads
- Machined Screw Journals to Print
- Teflon Coating on Screw
- Custom Drive Nut Materials or Design

17AV Encoder Option:

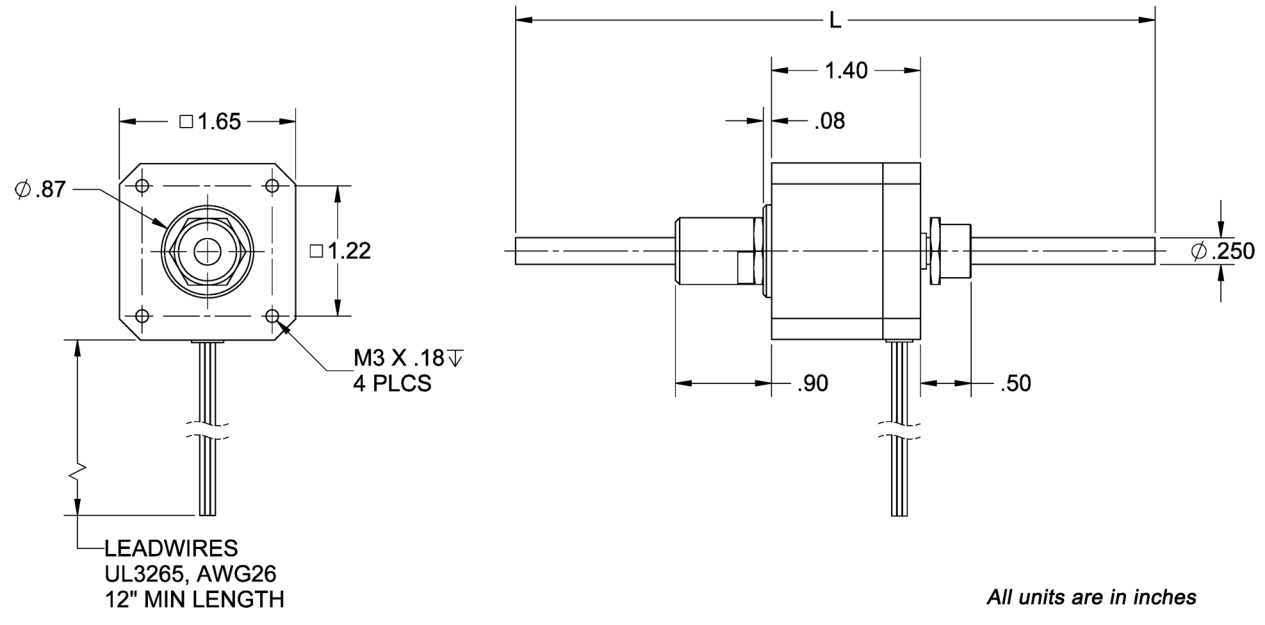


Note: See *Accessories* on our website for information on optional encoder and/or connector adders

With Anti-Backlash

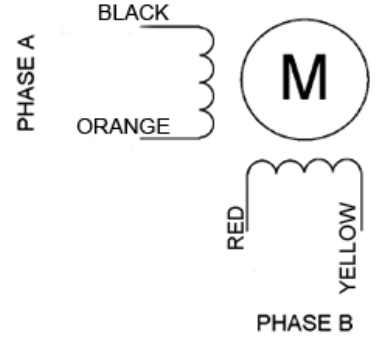


With Standard-Nut



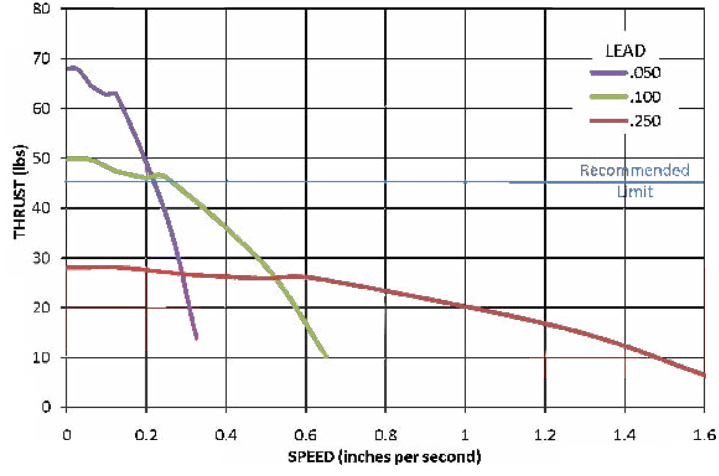
Switching Sequence

Step	Black	Orange	Red	Yellow
1	+	-	+	-
2	-	+	+	-
3	-	+	-	+
4	+	-	-	+



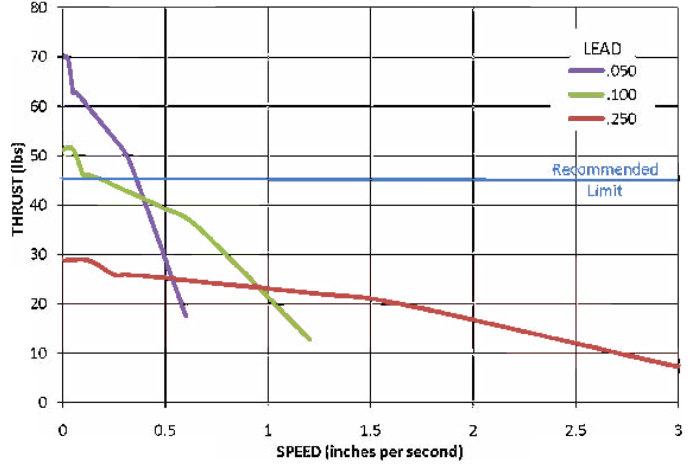
17AV101

24VDC, .5 A, Series



17AV102

24VDC, 1.0A, Series



17AV103

24VDC, 1.5A, Series

