

**FEATURES**

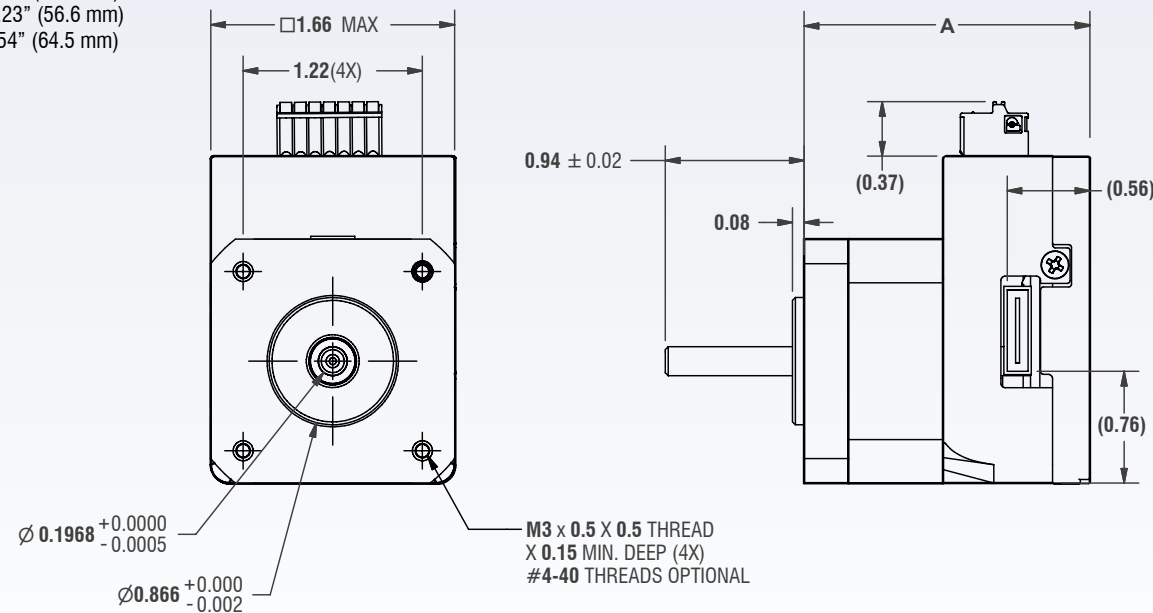
- NEMA 17, 1.8° Bipolar Signature Series Step Motor (see page 17)
- Operates from +12 to 48 VDC
- Up to 83 oz-in of Holding Torque
- Phase current ranges from 0.1 to 3.0 Amps Peak
- Step Resolutions from Full Step to 256x microstepping and from 5x to 250x
- Optically isolated Step, Direction, and Disable/Enable inputs
- Four selectable damping modes for smooth motion
- Pole Damping Technology™ (See page 8)

**SPECIFICATIONS**

- **INPUT VOLTAGE:**  
+12 to 48 VDC (Including Unregulated Power Supplies)
- **DRIVE CURRENT (PER PHASE):**  
0.1 to 3 Amps Peak
- **OPTICALLY ISOLATED INPUTS:**  
Step Clock, Direction, Enable & Disable
- **STEP FREQUENCY (MAX):**  
5 MHz
- **STEPS PER REVOLUTION (1.8° MOTOR):**  
200, 400, 800, 1000, 1600, 2000, 3200, 5000, 6400, 10000, 12800, 25000, 25600, 50000, 51200
- **MICROSTEP RESOLUTIONS (1.8° MOTOR):**  
Full, 2x, 4x, 5x, 8x, 10x, 16x, 25x, 32x, 50x, 64x, 125x, 128x, 250x, 256x

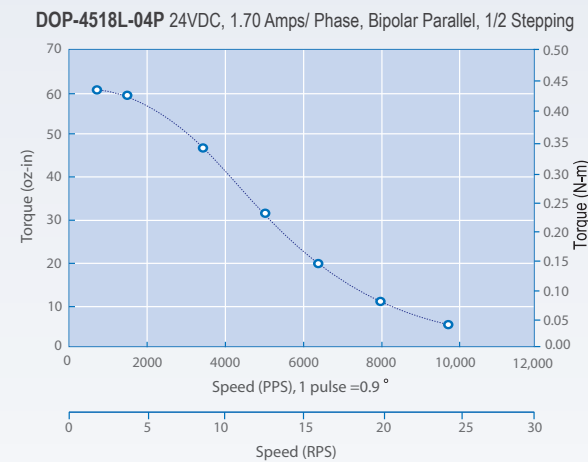
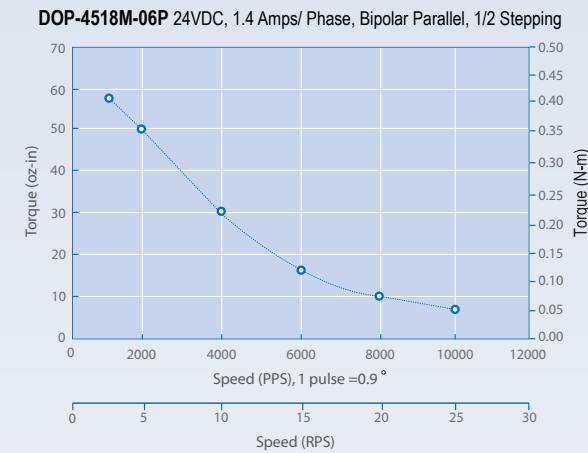
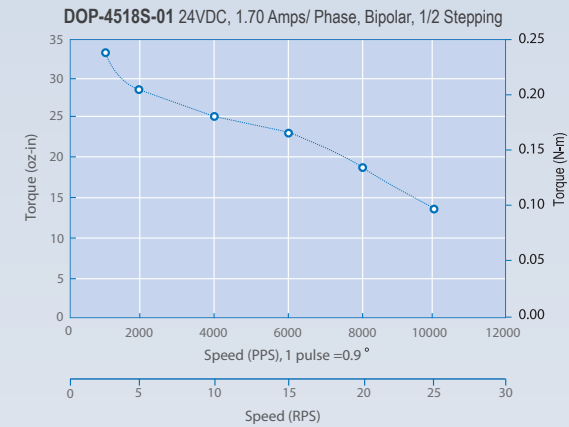
**DIMENSIONS**

**A. Overall Body Length**  
DO-4518S: 1.99" (50.5 mm)  
DO-4518M: 2.23" (56.6 mm)  
DO-4518L: 2.54" (64.5 mm)



Visit Lin Engineering's web site for dimension updates.

**TORQUE CURVES**



**MOTOR SPECIFICATIONS**

<b>Model DOP-4518S-01</b>		
<b>Holding Torque</b> oz-in (N-m)	45.0 (0.32)	
<b>Rotor Inertia</b> oz-in <sup>2</sup> (kg-cm <sup>2</sup> )	0.18 (0.03)	
<b>Weight (Motor + Driver)</b> lbs (kg)	0.60 (0.27)	
<b>Model DOP-4518M-06P</b>		
<b>Holding Torque</b> oz-in (N-m)	63.0 (0.44)	
<b>Rotor Inertia</b> oz-in <sup>2</sup> (kg-cm <sup>2</sup> )	0.28 (0.05)	
<b>Weight (Motor + Driver)</b> lbs (kg)	0.80 (0.36)	
<b>Model DOP-4518L-04S</b>		
<b>Holding Torque</b> oz-in (N-m)	83.0 (0.59)	
<b>Rotor Inertia</b> oz-in <sup>2</sup> (kg-cm <sup>2</sup> )	0.37 (0.07)	
<b>Weight (Motor + Driver)</b> lbs (kg)	0.90 (0.41)	

**OPTIONAL ENCODER**

Optional encoder available with SilverPak 17DE Plus

Encoder features:

- Max 1,250 cycles per revolution (CPR)
- Max 5,000 pulses per revolution (PPR) (quadrature)
- 2 channel quadrature TTL squarewave outputs
- Optional index (3rd channel)
- Position correction capabilities with user's external controller

**OPTIONAL SHAFT MODIFICATIONS**



For more shaft modifications options, see page 69