LIN ENGINEERING
MOTOR SPECIALISTS IN MOTION
A MOONS' COMPANY

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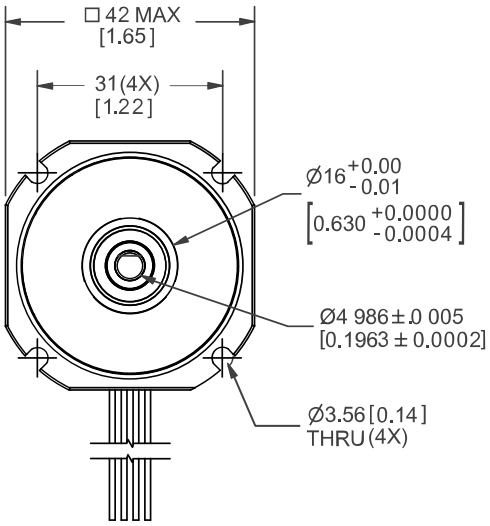
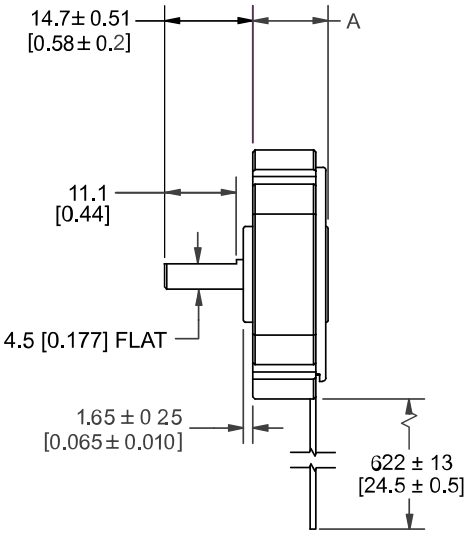
MOTOR SPECIFICATIONS

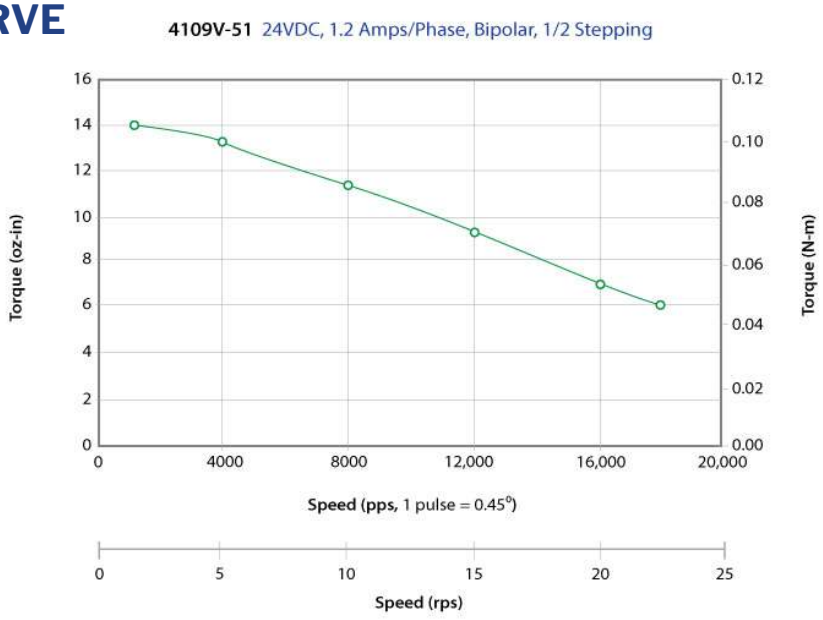
Part Number	**WO-4109V-51**
Step Angle	0.9°
Frame Size	NEMA 17
Body Length (Dim. A)	0.78 in (19.8 mm)
Current	1.2 Amps/Phase
Holding Torque	15 oz-in (0.11 Nm)
Resistance	3 Ohms/Phase
Rotor Inertia	0.08 oz-in^2
Number of Leads	4
Connection	Bipolar
Weight	0.28 lbs (0.13 kg)

DIMENSIONS





PERFORMANCE CURVE



OPERATING SPECIFICATIONS

Radial Play	0.001” max @ 1 lbs load
End Play	0.003” max @ 2 lbs load
Shaft Run Out	0.002” TIR
Concentricity of Mounting Pilot to Shaft	0.003” TIR
Perpendicularity of Shaft to Mounting Face	0.003” TIR
Max Axial Load	6 lbs
Maximum Case Temperature	80 C
Ambient Temperature	-20° to 50° C
Storage Temperature	-20° to 100° C
Humidity Range	85% or less, non-condensing
Magnet Wire Insulation	Class B 130° C
Insulation Resistance	100MΩ at 500 VDC
Dielectric Strength	500 VAC for 1 minute

WIRING TABLE

COLOR	FUNCTION
Red	A+ Phase
Blue	A- Phase
Green	B + Phase
Black	B- Phase

OPERATION & USAGE TIPS

Do not disassemble motors; a significant reduction in motor performance will occur.

Do not machine shafts; this will have a negative effect on shaft run out and perpendicularity.

Do not disconnect motor from drive while in operation.

Do not use holding torque/detent torque of motor as a fail safe brake.

Do not hold motor by lead wires.

Do not exceed the rated current; this wil burn the motor.

FAILURE TO COMPLY WITH THESE RECOMMENDATIONS WILL VOID ALL WARRANTY TERMS

RECOMMENDED

Microstepping Driver
R208

Single Axis Controller + Driver
R256-RO