

11YPG Series - High Torque Stepper Gearmotor



FEATURES

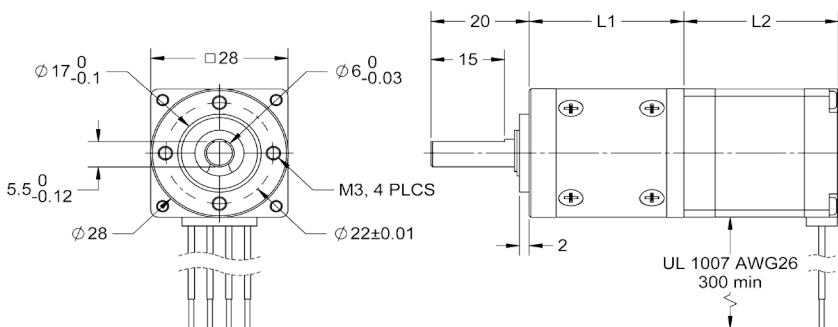
- NEMA Size 11 Integrated Gearmotor
- High-Torque Stepper Motor
- Economy Planetary Gearbox
- High Torque - Up to 833 oz-in
- Gear Ratios: 3.7 to 720
- 1.8° Step Angle
- Can be Customized for
 - Winding Currents
 - Shaft Options
 - Cables and Connectors
- CE Certified and RoHS Compliant



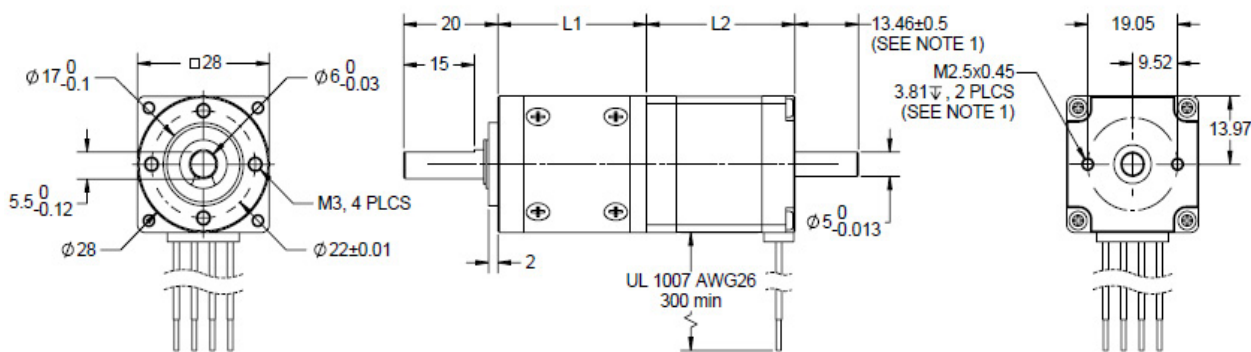
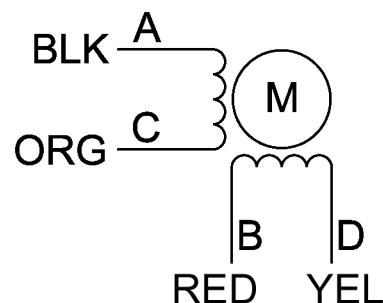
DESCRIPTION

The 11YPG Series Gearmotor incorporates a high-torque stepper motor and an economic planetary gearbox to offer you an exceptional value. This compact package can deliver torque up to 833 oz-in. Gear ratios are available from 3.7 to 720. This gearmotor is ideal for applications that require high torque in a small package. The gearmotor can be customized to perfectly match your voltage, current, and maximum operating speed for maximum flexibility.

DIMENSIONS



WIRING



L010580

NOTE 1: Dual shaft option only

Housing Material:	Metal	Radial Play at Shaft:	0.04mm
Bearing at Output:	Ball Bearing	Thrust Play at Shaft:	0.3mm
Radial Load:	11.02lbs	Backlash, at No-Load:	3°
Shaft Axial Load:	7.72lbs	Gearbox Shaft Diameter	5.5mm
Step Angle Accuracy:	± 5% (Full Step, No Load)	Ambient Temperature:	-20° to +50° C
Resistance Accuracy:	± 10%	Insulation Type:	Class B
Inductance Accuracy:	± 20%	Insulation Resistance:	100M Ohm Min, 500VDC
Temperature Rise:	80°C Max (2 Phases On)	Dielectric Strength:	500VAC for 1 minute

- Speed of the output shaft (after gearbox) = (Motor Speed)/(Gear Ratio)
- Torque of the output shaft (after gearbox) = (Motor Torque) X (Gear Ratio)
- Rotor Inertia of the output (shaft after gearbox) = (Rotor Motor Inertia) X (Gear Ratio)²

Create a complete Model Number by selecting a motor from Table 1 and Gearbox from Table 2

11YPG302S - LW4 - R100

SPECIFICATIONS

Model #	NEMA Size	Motor Specs								
		Bipolar Torque (oz-in)	Bipolar Current (A)	Bipolar Voltage (V)	Bipolar Resistance (ohm)	Bipolar Inductance (mH)	Rotor Inertia (oz-in-sec ²)	# of Lead Wires	Weight (lbs)	"L2" Length (mm)
11YPG102S-LW4	11	8.3	0.67	3.92	5.6	3.40	0.00013	4	0.24	31.8
11YPG202S-LW4	11	13.2	0.67	4.76	6.8	4.90	0.00017	4	0.31	44.5
11YPG302S-LW4	11	16.7	0.67	6.44	9.2	7.20	0.00025	4	0.44	50.8

Gearbox Ratio (R)	Exact Reduction Ratio	Rated Torque (oz-in)	Max Torque (oz-in)	Efficiency	L1 (mm)	Weight (lbs)
R3.7	3.71	28	83	90%	31.5	0.13
R5.2	5.18	28	83	90%	31.5	0.13
R14	13.76	56	167	81%	40.0	0.18
R19	19.22	56	167	81%	40.0	0.18
R27	26.83	56	167	81%	40.0	0.18
R51	51.06	139	417	73%	48.5	0.20
R71	71.30	139	417	73%	48.5	0.20
R100	99.55	139	417	73%	48.5	0.20
R139	138.99	139	417	73%	48.5	0.20
R189	189.45	228	833	66%	57.5	0.23
R264	264.52	228	833	66%	57.5	0.23
R369	369.32	228	833	66%	57.5	0.23
R516	515.66	228	833	66%	57.5	0.23
R720	719.98	228	833	66%	57.5	0.23

Note: Custom leadwires, cables, connectors, and windings are available upon request.