

# 34YSG Series Gear Motors



FEATURES

- **NEMA Size 34**
- **Twelve Gear Ratios from 3 to 150**
- **Best Selection for High Speed Applications**
- **Higher Torque than Other Motor Manufacturers**
- **1.8° Step Angle**
- **High Torque - Up to 3500 oz-in**
- **Can be Customized for**
  - Winding Current
  - Shaft Options
  - Cables and Connectors
- **CE Certified and RoHS Compliant**



DESCRIPTION

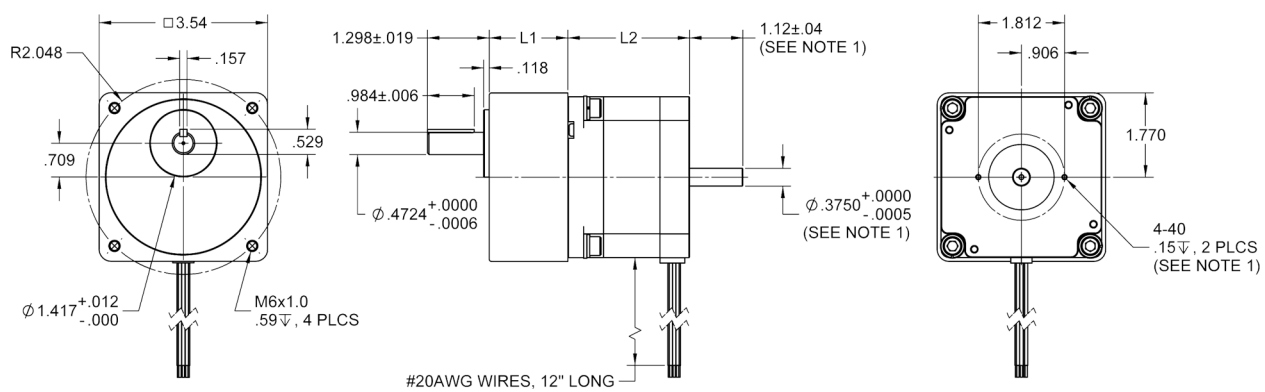
The 34YSG Series gear motors offer a great value without sacrificing quality. A broad line of motor windings, gear ratios, and stack lengths are available off-the-shelf, or the motors can be customized to fit your machine requirements. The standard 8-lead motors can be connected in all possible configurations: series, unipolar, or parallel, to allow the maximum flexibility for your application. We can also customize the winding to perfectly match your voltage, current, maximum operating speed, and gear ratios.

SPECIFICATIONS

Model #	Motor Bipolar Torque (oz-in)	Peak Torque (oz-in)	Series Current (A)	Actual Gear Ratio	L1 (inches)	L2 (inches)	Total Length (inches)	Reflected Rotor Inertia (oz-in-sec <sup>2</sup> )	Average Backlash (deg)	Weight (lbs)
34YSG008S-LW8-R3	590	1770	2.8	3:1	1.77	2.56	4.33	0.126	4	5.4
34YSG106S-LW8-12.5	650	1950	2.8	12.6:1	1.77	3.15	4.92	3.100	4	6.52
34YSG106S-LW8-50	650	1950	2.8	50:1	1.77	3.15	4.92	49.564	2.5	7.38
34YSG108S-LW8-R3	650	1950	2.8	3:1	1.77	3.15	4.92	0.180	4	6.7
34YSG108S-LW8-R12.5	650	3500	2.8	12.6:1	1.77	3.15	4.92	3.175	4	6.7
34YSG108S-LW8-R50	650	3500	2.8	50:1	2.36	3.15	5.51	50.000	2.5	6.7
34YSG207S-LW8-R5	1200	3500	2.5	4.985:1	1.77	4.65	6.42	0.944	4	9.62
34YSG207S-LW8-R12.5	1200	3500	2.5	12.6:1	1.77	4.65	6.42	6.033	4	9.7
34YSG207S-LW8-R25	1200	3500	2.5	24:1	1.77	4.65	6.42	23.897	3.5	9.8
34YSG207S-LW8-R50	1200	3500	2.5	50:1	2.36	4.65	7.01	95.000	2.5	9.8
34YSG307S-LW8-R12.5	1700	3500	2.5	12.6:1	1.77	6.14	7.91	9.048	4	12.86
34YSG307S-LW8-R50	1700	3500	2.5	50:1	2.36	6.14	8.50	142.500	2.5	13.1
34YSG314S-LW8-R3	1700	3500	4.9	3:1	1.77	6.14	7.91	0.510	4	12.52
34YSG314S-LW8-R12.5	1700	3500	4.9	12.6:1	1.77	6.14	7.91	9.048	4	12.84

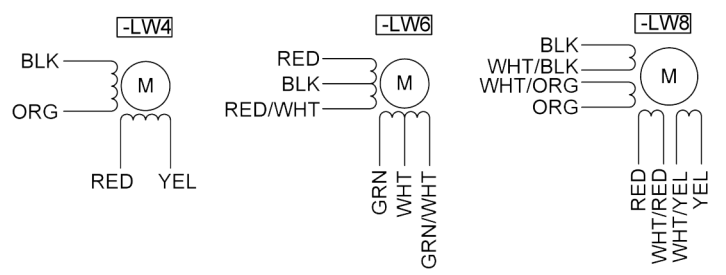
Notes: Refer to 34Y Series Motor Specifications for complete list of available motors to match to gear ratios of 3, 5, 7.5, 12.5, 15, 25, 30, 50, 75, 100, 120, 150. Peak torque values can be greater in some applications. Backlash is determined by the Gear Ratio. LW8 is for 8 leadwires, other leadwire options are available. The 9th character "S" denotes a single shaft, use "D" for double shaft. Double shafts include encoder mounting provisions. Custom leadwires, cables, connectors, and windings are available upon request.

L010209



\* Note 1: on models 34YSGXXD-LWX

(All units are inches)



Connection	Lead Wire Connection	Lead Wire Color
4 - Lead Bipolar Series MBC or MLP Series	Phase 1 (A)	Black
	Phase 3 (/A)	Orange
	Phase 2 (B)	Red
	Phase 4 (/B)	Yellow
	Connect Wires with Wire Nut	White/Black & White/Orange
4 - Lead Bipolar Parallel MBC or MLP Series	Phase 1 (A)	Black & White/Orange
	Phase 3 (/A)	Orange & White/Black
	Phase 2 (B)	Red & White/Yellow
	Phase 4 (/B)	Yellow & White/Red
	Connect Wires with Wire Nut	White/Red & White/Yellow
6 - Lead Unipolar BLD, TM Series	Phase 1	Black
	Phase 3	Orange
	Phase 2	Red
	Phase 4	Yellow
	Common Phase 1 & 3	White/Black & White/Orange
	Common Phase 2 & 4	White/Red & White/Yellow

Step Angle Accuracy:	+/- 5% (Full Step, No Load)	Insulation Resistance:	100M Ohm Min, 500VDC
Resistance Accuracy:	+/- 10%	Dielectric Strength:	820VAC/s for 3mA
Inductance Accuracy:	+/- 20%	Shaft Radial Play:	0.02" Max (1.0 lb load)
Temperature Rise:	80° C Max (2 Phases On)	Shaft Axial Play:	0.08" Max (1.0 lb load)
Ambient Temperature:	-20° to +50° C	Max Radial Force:	49.5 lbs (0.79" from flange)
Insulation Type:	Class B	Max Axial Force:	13.5 lbs-Force