

BLYSG34xS Series - Brushless DC Spur Gear Motors



FEATURES

- **NEMA Size 34 BLDC Motor with Spur Gearboxes**
- **Compact Size and Power Density**
- **Cost-Effective Solution**
- **Lifetime of over 2,000 hours**
- **Available in Single and Double Shaft Options**
- **Can be Customized for**
 - **Maximum Speed/Winding Current**
 - **Shaft Options and Modifications**
 - **Cables and Connectors**
- **CE Certified and RoHS Compliant**



DESCRIPTION

The BLYSG34xS Series Brushless DC Spur Gearmotors come in a compact package with high power density. These motors are cost-effective solutions to many velocity control applications. They come in three stack lengths to provide just the right torque for a specific application. A number of windings are available off-the-shelf and the motors can be customized to fit specific machine requirements. The motor comes in a standard 11-lead configuration and can be wired for either delta or star configurations. We can also customize the windings to perfectly match your voltage, current, and maximum operating speed. Special shaft modifications, gear ratios, cables and connectors are also available upon request.

SPECIFICATIONS

Output on Shaft of Motor before Gearbox												
Model #	Peak Torque (oz-in)	Rated Torque (oz-in)	Rated Power (W)	Rated Voltage (V)	Line to Line Inductance (mH)	Torque Constant (oz-in/A)	Rated Speed (RPM)	Back EMF Voltage (V/kRPM)	Winding Resistance (ohms)	Rotor Inertia (oz-in-sec ²)	Weight* (lbs)	L2** (in)
BLYSG341S-48V-3200	149	50	110	48	2.20	14.0	3200	7.67	0.45	0.0057	3.3	2.20
BLYSG342S-24V-3000	297	100	220	24	0.08	7.93	3200	4.34	0.07	0.0113	4.1	2.79
BLYSG343S-48V-3200	595	198	440	48	0.61	16.99	3200	9.31	0.12	0.0227	5.7	3.81
BLYSG344S-48V-3200	892	297	660	48	0.10	16.57	3200	11.50	0.07	0.0340	8.8	4.78

Output on Shaft after Gearbox			
Gear Ratio	Number of Gear Trains	Gearbox Length L1 (in)	Peak Torque (oz-in)
R3	2	1.65	3472
R5	2	1.65	3472
R7.5	2	1.65	3472
R15	2	1.65	3472
R25	3	2.36	3472
R30	3	2.36	3472
R50	4	2.36	3472
R100	4	2.36	3472
R120	4	2.36	3472
R150	4	2.36	3472

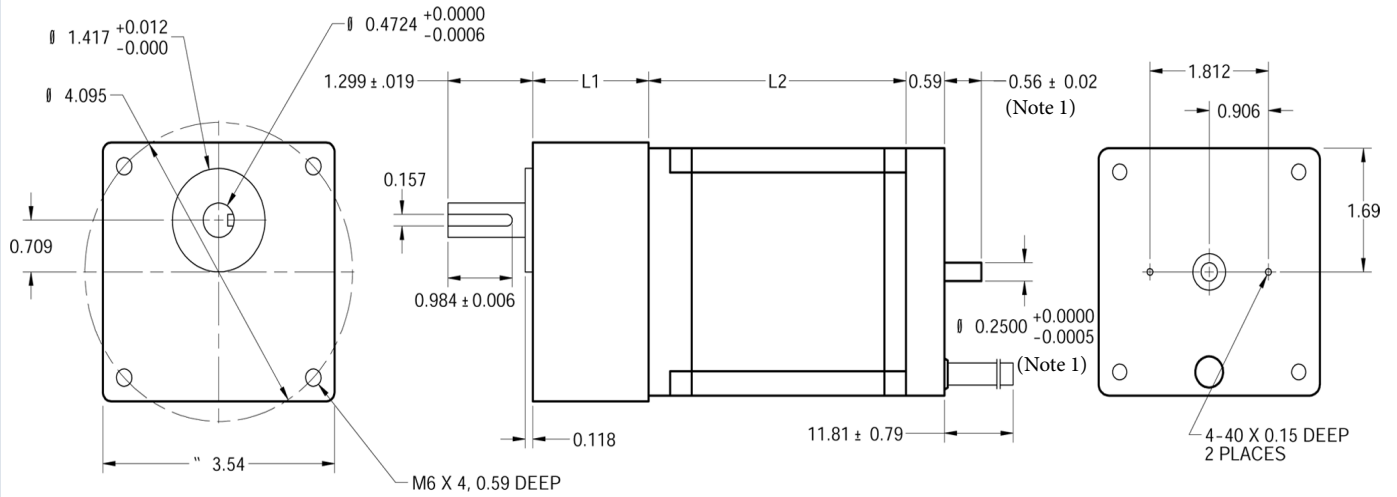
Note: Custom leadwires, cables, connectors, and windings are available upon request.

*Weights will vary based on gear ratio selected.

**Overall length of gearmotors will vary based on gear ratio selected.

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DIMENSIONS

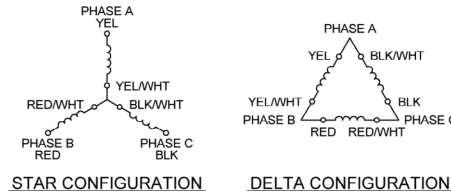


Note 1: Dual Shaft option

Units: Inch

WIRING INFORMATIONS

Description	Motor Wire Color	Cable Adder Color
Hall Supply	Red	Re/White
Hall A	Blue	Orange/White
Hall B	Green	Orange
Hall C	White	Yellow/White
Hall Ground	Black	Black/White
Phase A	Yellow, Yel/Wht	Yellow
Phase B	Red, Red/Wht	Red
Phase C	Black, Blk/Wht	Black



NOTE:
 1. STAR CONFIGURATION IS DEFAULT.
 2. FOR DELTA CONFIGURATION:
 REMOVE PLASTIC CAP.
 REMOVE 3 SCREWS HOLDING PCB.
 ROTATE HALL PCB TO LINE UP WITH RED MARKER. REPLACE SCREWS.
 REPLACE PLASTIC CAP.

SPECIFICATIONS

Hall Effect Angle:	120° electrical angle	Number of poles:	8
Insulation Class:	Class B	Number of phase:	3
Dielectric Strength:	500VDC for one minute	Temperature Rise:	70° C
Insulation Resistance:	100MOhms Min, 500VDC	Life Expectancy:	Over 2000 Hours
Axial Load:	10kg	Radial Load:	30kg - 10mm from end of shaft