

- **NEMA Size 23 BLDC Motors**
- **Compact Size and Power Density**
- **Cost-Effective Solution**
- **Integrated Spur Gearbox**
- **Available in Dual Shaft: BLYSG23xD**
- **Can be Customized for**
 - **Maximum Speed/Winding Current**
 - **Shaft Options**
 - **Cables and Connectors**
- **CE Certified and RoHS Compliant**



The BLWSG23 Series Brushless DC Motors come in a compact package with high power density. These motors are cost-effective solutions to many velocity control applications. They come in four different stack lengths to provide you with just the right torque for your application. A number of windings are available off-the-shelf and the motors can be customized to fit your machine requirements. The motors come in a standard 8- lead configuration. We can also customize the windings to perfectly match your voltage, current, and maximum operating speed. Special shaft modifications, cables and connectors are also available upon request.

Model #	FRAME Size	Rated Voltage (V)	Rated Speed (RPM)	Rated Power (W)	Peak Torque (oz-in)	Peak Current (A)	Torque Constant (oz-in/A)	Back EMF Voltage (V/kRPM)	Reflected Inertia (oz-in-sec ²)	Weight* (lbs)	L1 (in)	L2** (in)	Total Length (in)
BLWSG231D-36V-4000-R75	NEMA 23	36	53	25	23.37	3.50	7.51	5.5	2.36	1.46	1.57	1.92	3.49
BLWSG232D-36V-4000-R7.5	NEMA 23	36	533	50	412	7.00	59	50	0.06	1.62	1.26	2.16	3.42
BLWSG232D-36V-4000-R75	NEMA 23	36	53	50	4125	7.00	8.50	4.5	5.96	1.62	1.57	2.16	3.73
BLWSG233D-36V-4000-R7.5	NEMA 23	36	533	95	750	15.0	50	50	0.10	2.38	1.26	2.95	4.21
BLWSG233D-36V-4000-R75	NEMA 23	36	53	95	7500	15.0	8.50	4.45	9.50	2.38	1.57	2.95	4.52
BLWSG234D-36V-4000-R3	NEMA 23	36	1333	135	435	18.0	24	20	0.02	2.72	1.26	3.74	5.00
BLWSG234D-36V-4000-R50	NEMA 23	36	80	135	7250	18.0	403	330	6.13	2.72	1.57	3.74	5.31
BLWSG234D-36V-4000-R7.5	NEMA 23	36	533	135	1087	18.0	60	50	0.14	2.72	1.26	3.74	5.00
BLWSG234D-36V-4000-R75	NEMA 23	36	53	135	94.88	18.0	8.92	4.8	13.8	2.72	1.57	3.74	5.31
BLWSG235D-36V-4000-R12.5	NEMA 23	36	320	180	2313	22.5	103	83	0.51	3.32	1.26	4.53	5.79
BLWSG235D-36V-4000-R3	NEMA 23	36	1333	180	555	22.5	25	20	0.03	3.32	1.57	4.53	5.71
BLWSG235D-36V-4000-R50	NEMA 23	36	80	180	9250	22.5	411	330	8.15	3.32	1.26	4.53	6.18
BLWSG235D-36V-4000-R7.5	NEMA 23	36	533	180	1388	22.5	62	50	0.18	3.32	1.57	4.53	5.71

Available Gearbox Ratios: 3, 7.5, 12.5, 15, 25, 30, 50, 75, 90, 100, 120, 150

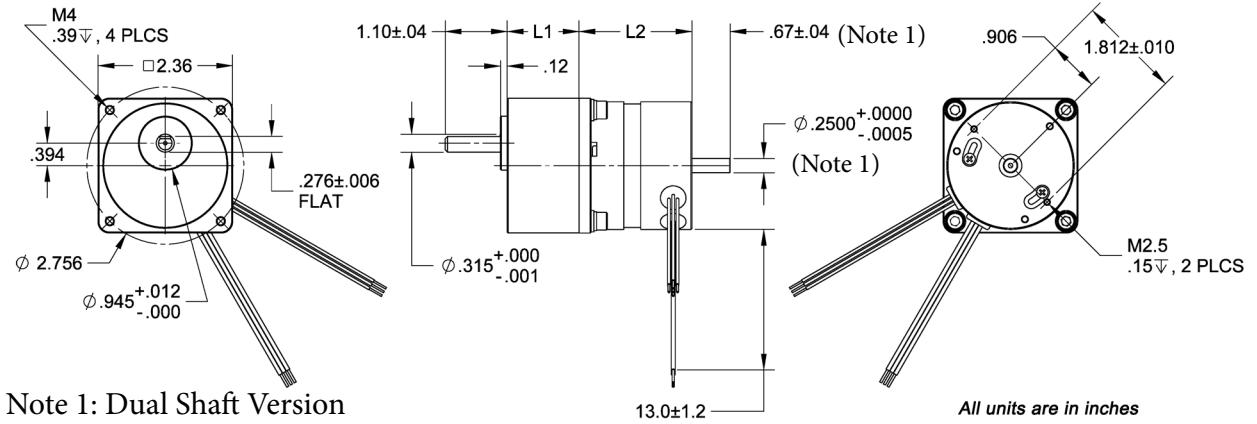
Notes: The above specs are for motors hooked up with the star configuration. For different rated speeds, please contact the factory. Custom leadwires, cables, connectors, and windings are available upon request.

*Weight will vary based on gear ratio selected

**Length of gearmotor will vary based on gear ratio selected

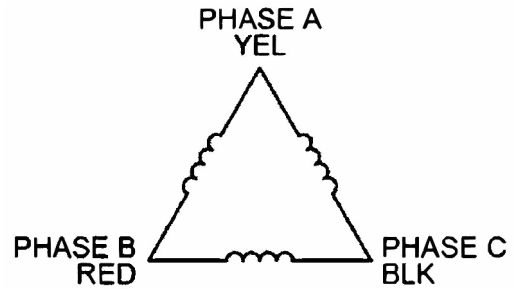
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DIMENSIONS



WIRING INFORMATION

Wire Color	Description
Red	Hall Supply
Blue	Hall A
Green	Hall B
White	Hall C
Black	Hall Ground
Yellow	Phase A
Red	Phase B
Black	Phase C



SPECIFICATIONS

Hall Effect:	120° Electrical Angle	Number of Poles:	4
Insulation Class:	Class B	Number of Phases:	3
Dielectric Strength:	500VDC for one minute	Temperature Rise:	70°C
Insulation Resistance:	100MOhms Min, 500VDC	Life Expectancy:	Over 2,000 Hours

Ratio:	3.0	7.5	12.5	15	25	30	50	75	90	100	120	150
Average Backlash at No Load:	4 deg			3.5 deg			3.0 deg			2.5 deg		