

BLWS23 Series - Brushless DC Motors



FEATURES

- **NEMA Size 23 BLDC Motors**
- **Compact Size and Power Density**
- **Cost Effective Solution**
- **Long Life and Highly Reliable**
- **Can be Customized for**
 - **Maximum Speed**
 - **Winding Current**
 - **Shaft Options**
 - **Cables and Connectors**
- **CE Certified and RoHS Compliant**



DESCRIPTION

The BLWS23 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 five different stack lengths to provide you with just the right torque for your application. A number of windings are available off-the-shelf, and all 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.

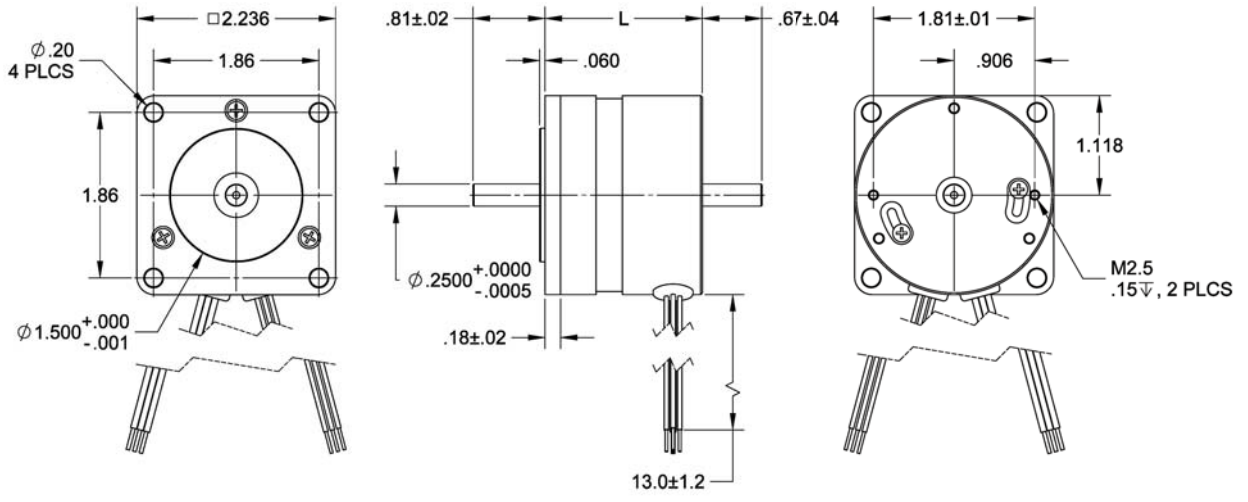
SPECIFICATIONS

Model #	FRAME Size	Rated Voltage (V)	Rated Speed (RPM)	Rated Power (W)	Peak Torque (oz-in)	Peak Current (A)	Line to Line Resistance (ohms)	Line to Line Inductance (mH)	Torque Constant (oz-in/A)	Back EMF Voltage (V/ kRPM)	Rotor Inertia (oz-in-sec ²)	Weight (lbs)	"L" Length (in)
BLWS231S-36V-4000	NEMA 23	36	4000	23	22.66	3.5	4.1	10.0	7.5	5.5	0.00042	0.6	1.77
BLWS232S-36V-4000	NEMA 23	36	4000	46	55.23	6.8	1.5	4.2	8.92	6.6	0.00106	0.9	2.16
BLWS233S-36V-4000	NEMA 23	36	4000	92	99.13	11.5	0.7	2.2	8.92	6.6	0.00169	1.5	2.95
BLWS234S-36V-4000	NEMA 23	36	4000	133	141.6	18.0	0.45	1.4	8.92	6.6	0.00245	2.0	3.74
BLWS235S-36V-4000	NEMA 23	36	4000	180	179.85	22.5	0.35	1.0	8.92	6.6	0.00326	2.66	4.53

Note: The 8th character "S" denotes a single shaft, use "D" for double shaft. Custom leadwires, cables, connectors, and windngs are available upon request.

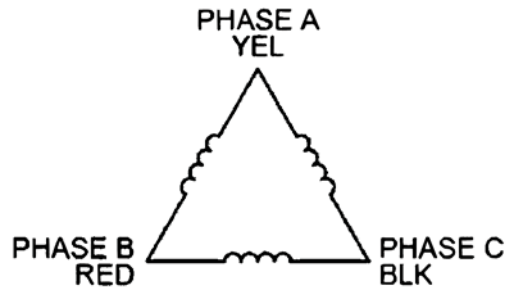
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DIMENSIONS



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

Winding Type:	Delta, 4 Poles	Max. Radial Force:	75N @ 20mm from the Flange
Hall Effect Angle:	120 Degree Electrical Angle	Max. Axial Force:	10N
Shaft Run Out:	0.025mm	Insulation Class:	Class B
Radial Play:	0.02mm@450g	Dielectric Strength:	500VDC for one Minute
End Play:	0.08mm@450g	Insulation Resistance:	100MOhm, 500VDC