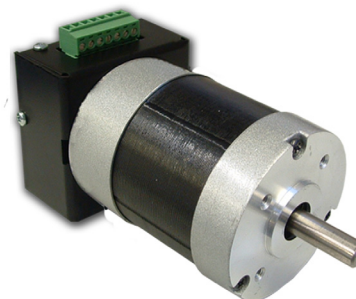


# BLWR23MD Series - BLDC Integrated Motors



## FEATURES

- **NEMA 23 BLDC Motor and Driver**
- **Cost-Effective Solution**
- **Compact Size and Power Density**
- **Long Life and Highly Reliable**
- **Can be Customized for**
  - **Maximum Speed**
  - **Winding Current**
  - **Shaft Options**
- **Motor Frame: 2.3" Round**



## DESCRIPTION

The BLWR23MD Series Brushless Integrated Motor/Controller combines a powerful BLDC motor design with the drive electronics in a compact package. These motors and controls are cost-effective solutions to many velocity control applications. By supplying a 0-5 VDC input or connecting a simple potentiometer, this BLDC motor is easy to control. Terminal Block connections allow this motor/controller to be easily installed into any application. A pulse output is provided to digitally read the speed the shaft is turning at. We can also customize the winding to perfectly match your voltage, current and maximum operating speed. Special shaft modifications, cables and connectors are also available upon request.

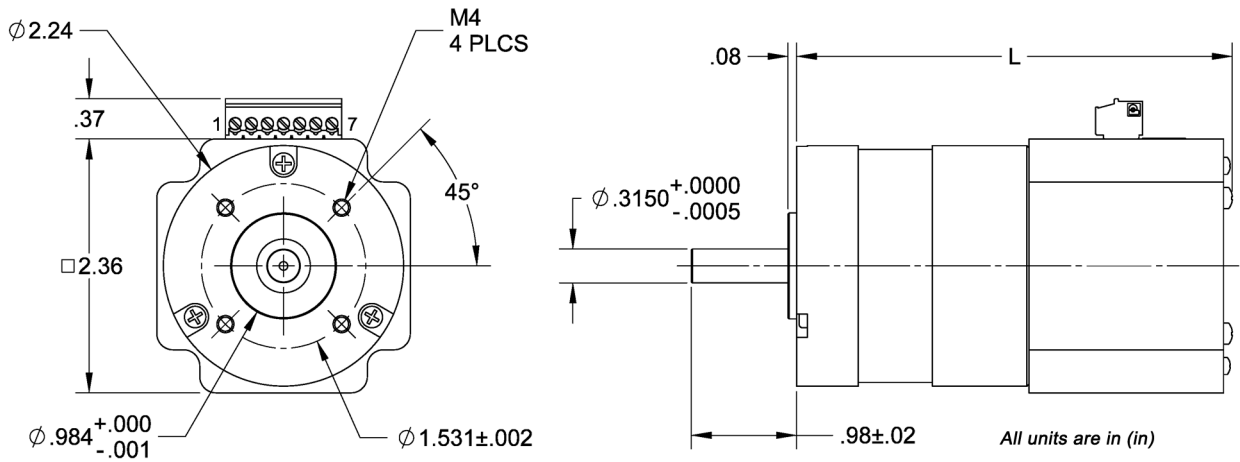
## SPECIFICATIONS

Model #	Motor Frame	Rated Voltage (V)	Rated Speed (RPM)	Rated Power (RPM)	Peak Torque (oz-in)	Torque Constant (oz-in/A)	Rotor Inertia (oz-in-sec <sup>2</sup> )	Weight (lbs)	L Length (in)
BLWR23MD2S-36V-4000	2.3 in. Round	36	4000	50	55	9.0	0.00106	1.4	3.98
BLWR23MD3S-36V-4000	2.3 in. Round	36	4000	95	100	9.0	0.00169	2.0	5.55
BLWR23MD4S-36V-4000	2.3 in. Round	36	4000	135	145	9.0	0.00245	2.5	6.34
BLWR23MD5S-36V-4000	2.3 in. Round	36	4000	185	186	8.9	0.00326	3.1	7.09

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

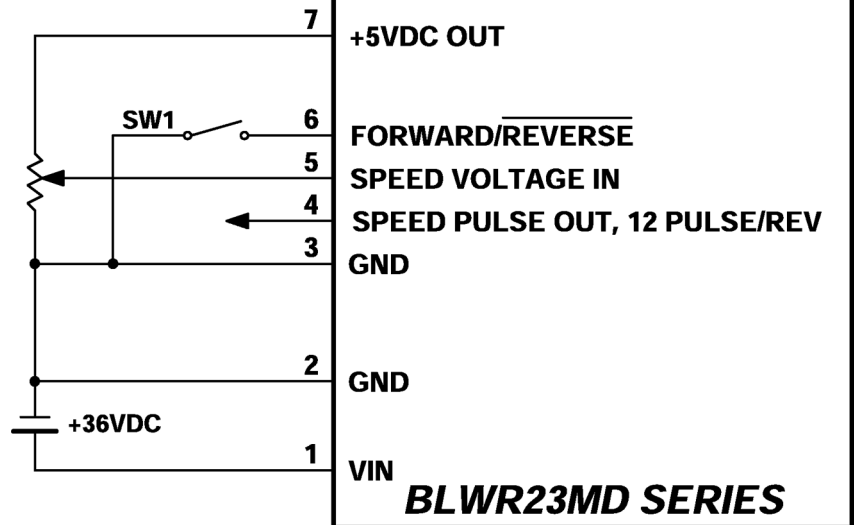
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DIMENSIONS



WIRING INFORMATION

Pin #	Description
7	+5VDC
6	Direction
5	0-5 VDC Speed Control
4	Pulse Output
3	Ground
2	Ground
1	Input Power (±15%)



SPECIFICATIONS

Winding Type:	Delta, 8 Poles	Max Radial Force:	28N @ 20mm from Flange
Hall Effect Angle:	120 Degree Electrical Angle	Max Axial Force:	10N - Force
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