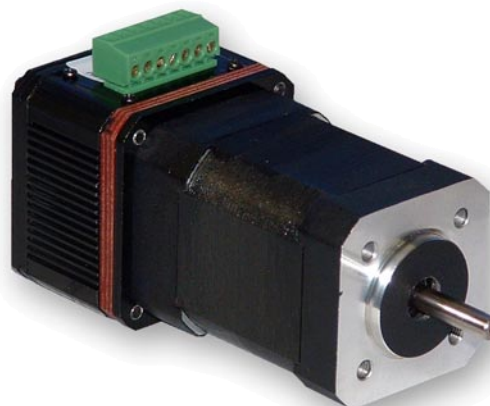


BLY17MD Series - BLDC Integrated Motor/Drivers



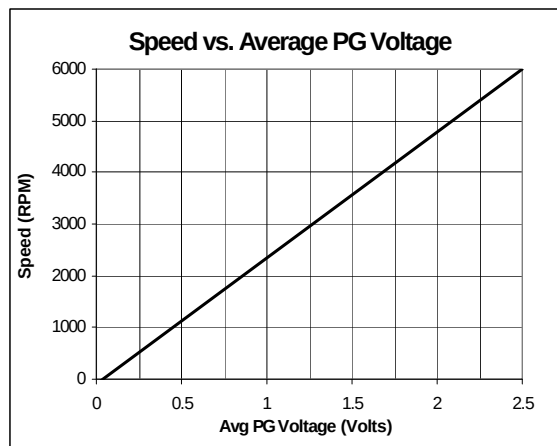
FEATURES

- **Size 17 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



DESCRIPTION

The BLY17MD Series Brushless Integrated Motor/Driver combines a powerful BLDC motor design with the drive electronics in a compact package. These integrated motors/drivers 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/driver to be easily installed into any application. A pulse output is provided to digitally read the speed the shaft is turning. The average value of the voltage on PG is directly proportional to speed, so this output can be used as a true tachometer for speed feedback with an external filter or averaging circuit which usually consists of a resistor and capacitor (i.e. 20k and 0.1uF).

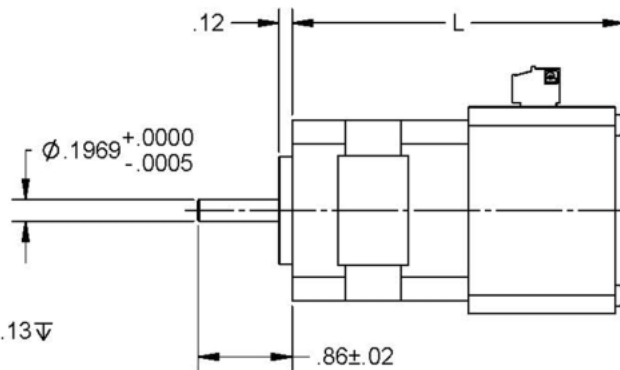
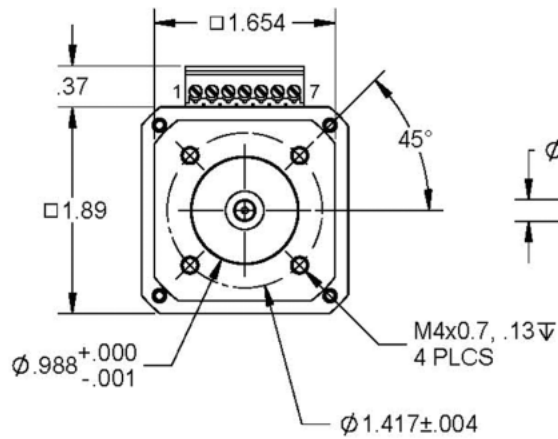


SPECIFICATIONS

Model #	FRAME Size	Rated Voltage (V)	Rated Speed (RPM)	No Load Speed (RPM)	Rated Power (W)	Peak Torque (oz-in)	Torque Constant (oz-in/A)	Rotor Inertia (oz-in-sec ²)	Weight (lbs)	"L" Length (in)
BLY17MD1S-24V-4000	NEMA 17	24	4000	6200	26	30	5.0	0.00016	0.9	3.03
BLY17MD2S-24V-4000	NEMA 17	24	4000	6200	52	60	5.0	0.00032	1.4	4.60
BLY17MD3S-24V-4000	NEMA 17	24	4000	5800	77.5	80	5.0	0.00010	1.9	5.39
BLY17MD4S-24V-4000	NEMA 17	24	4000	6000	104	106	5.32	0.00135	2.4	6.18

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

L010237



(All units are inches)

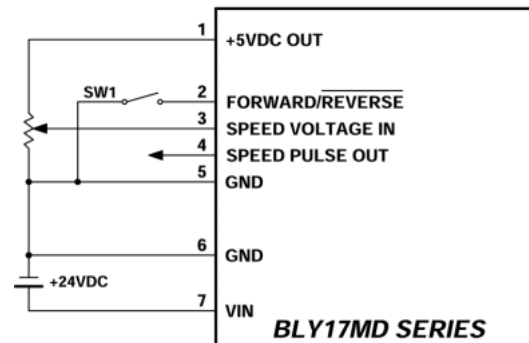
CONNECTOR PINOUTS

+5V	F/R	SV	PG	GND	GND	+Vp
1	2	3	4	5	6	7

7 +Vp---DC POWER INPUT +24VDC
6 GND---COMMON GND OF SYSTEM
5 GND---COMMON GND OF SYSTEM
4 PG---SPEED PULSE OUTPUT(TTL),
3 SV---SPEED VOLTAGE 0~5VDC
2 F/R---ROTATING DIRECTION
1 +5V---+5V VOLTAGE OUTPUT

NOTE:
SPEED CLOSE-LOOP CONTROL: 5000 RPM.
MAX. @ SV=5VDC

Terminal Block Pin	Description
1	+5 VDC Outl
2	Forward/Reverse
3	Speed Voltage In
4	Speed Pulse Out
5	Ground
6	Ground
7	Vin



DESCRIPTION

WIRING INFORMATION

SPECIFICATIONS

Winding Type:	Star, 4 Poles	Max. radial force:	15N @ 10mm 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