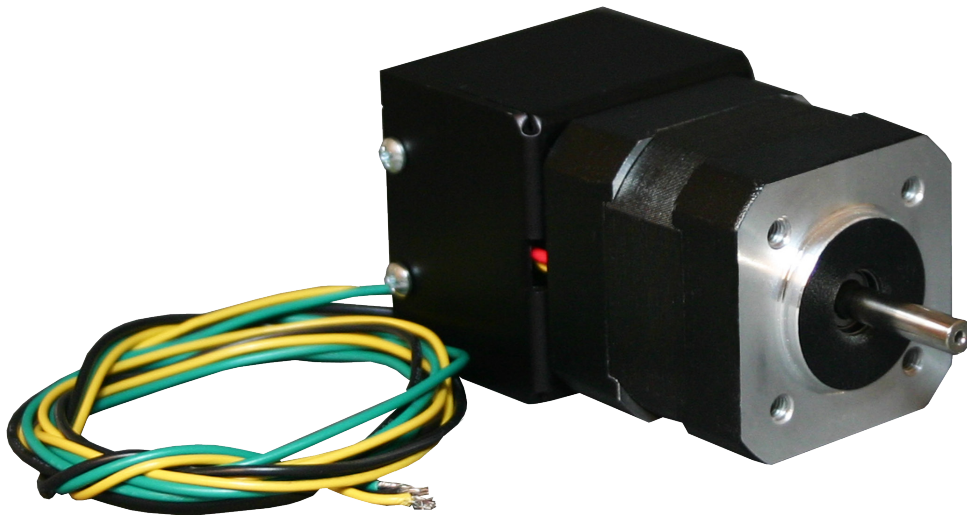


BLY17MDA-2W Series 24V, 10A Brushless Controller/Motor

User's Guide



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BLY17MDA-2W Driver Features

- Open-Loop Velocity Mode
- 4000 RPM Rated Speed Range
- 6200 RPM No-Load Speed Range
- 2-Quadrant Operation
- Short Circuit Protection
- Requires 24VDC
- Maximum Current Limit Setting at 10.0 Amps Peak
- Direction Input
- Compact Size

General Description

The BLY17MDA-2W is a compact construction that implements a DC Brushless controller and a DC Brushless motor in one streamline package only requiring power and ground. With the two parts combined into one casing, the need to wire up the motor has been eliminated. The DC Brushless controller operates off 24VDC in a 2 wire system. The high-speed DC Brushless motor can operate at a rated speed of 4000RPM, a no-load speed of 6200RPM can generate up to 35.4oz-in of continuous torque, and deliver as much as 105W, with the BLY17MDA4-2W offering. The direction of the motor can be preset by the direction control input. Similar to a Brushed DC motor, the speed is varied by the input voltage. ****Other voltage and speed options are available, please contact Anaheim Automation directly for more information. ****

Fault Protection

A cycle-by-cycle over current protection is provided when the motor current level exceeding the current limit of 10A peak is produced. When the over current protection is activated, the controller shuts off the outputs to the motor.

| Part # | Description |
|-------------|--------------------------------------|
| BLY17MDA-2W | Open Loop Brushless Controller/Motor |
| PSA24V2.7A | DC Power Supply 24VDC at 2.7 Amps |

Specifications

Direction (Green Wire):

CW (facing front shaft): Connect to Yellow Wire - high input

CCW (facing front shaft): Connect to Black Wire - low input

VIN (Yellow Wire): (18VDC min., 30VDC max.)

24VDC

GND (Black Wire):

0VDC

Specifications (cont.)

Output Current Rating:

10.0 Amperes peak per phase maximum operating current
 (5.0 amperes average per phase maximum operation current)

Operating Temperature:

Heat Sink: 0° - 70°C

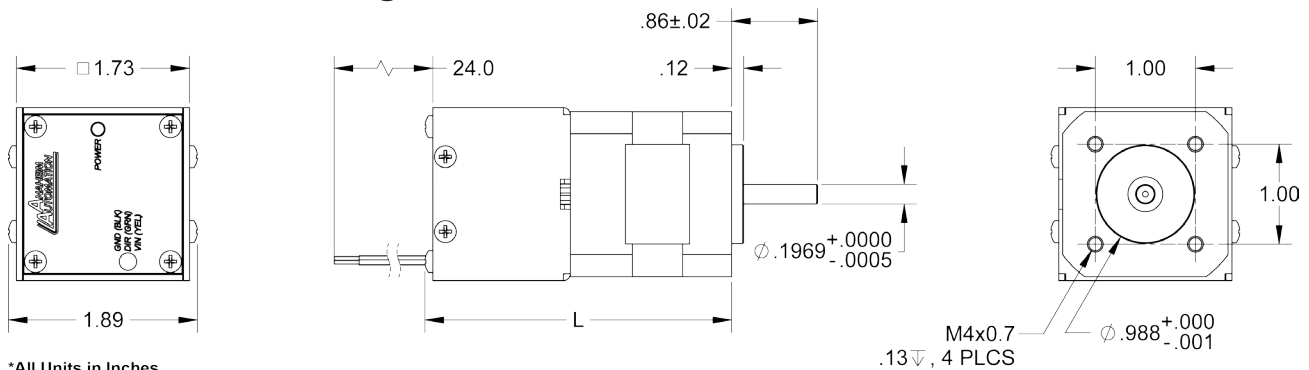
Motor Direction

The motor direction feature allows the changing of the rotation of the motor by tying the direction wire to power or ground. This input should not be changed while motion is in progress. A high (24VDC) input causes the motor to turn in the CW direction, while a low (0VDC) at this input

Heating Considerations

The temperature of the motor should never be allowed to rise above 70° Celsius. If necessary, mount the unit to an additional heat sink or air should be blown across the heat sink to maintain suitable temperatures.

Dimensions and Ratings



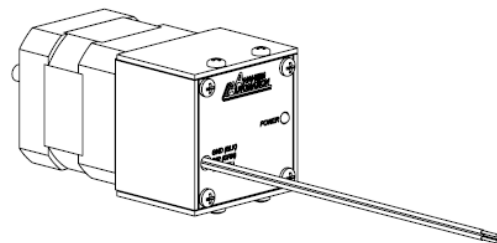
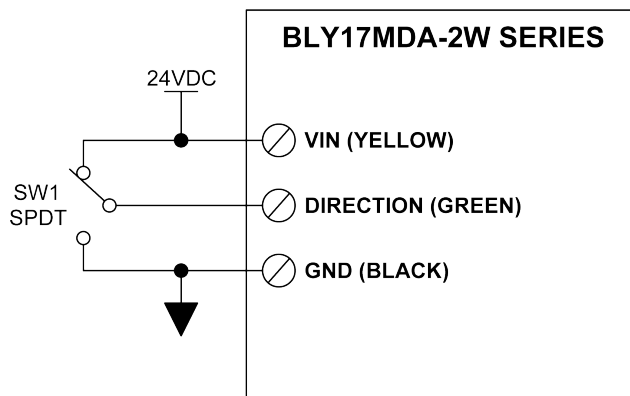
*All Units in Inches

| Model | L (in) | Torque (oz-in) | Power (W) | Current (A) |
|-----------------------|--------|----------------|-----------|-------------|
| BLY17MDA1-24V-4000-2W | 2.975 | 8.9 | 26.2 | 1.1 |
| BLY17MDA2-24V-4000-2W | 3.775 | 17.7 | 52.4 | 2.2 |
| BLY17MDA3-24V-4000-2W | 4.575 | 26.2 | 77.6 | 3.3 |
| BLY17MDA4-24V-4000-2W | 5.275 | 35.4 | 104.8 | 4.4 |

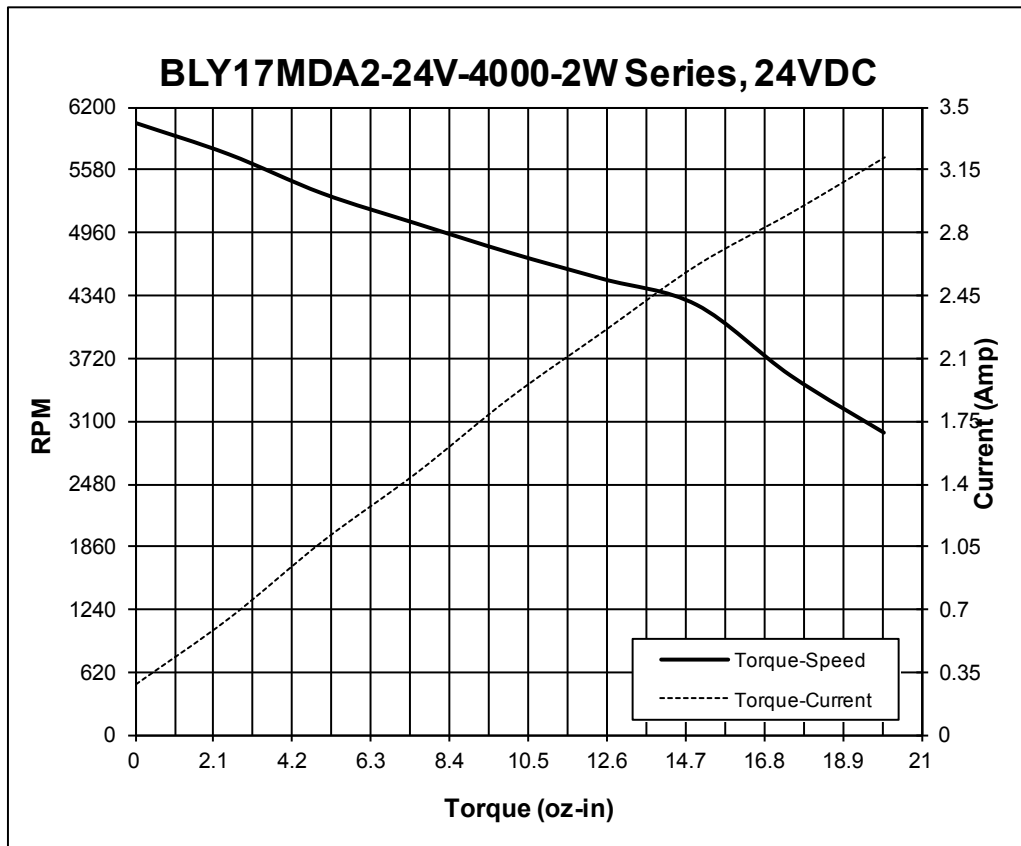
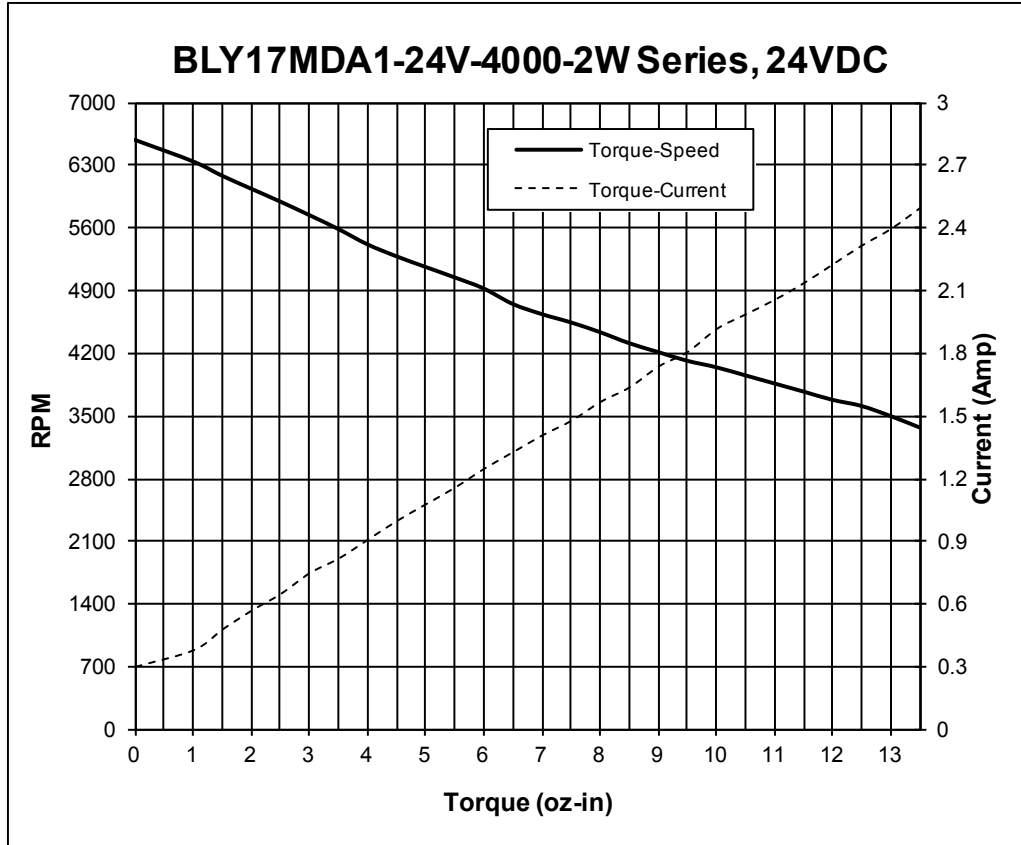
Wire Descriptions

| Wire Colors | Description |
|-------------|-------------|
| Black | GND |
| Green | Direction |
| Yellow | VIN |

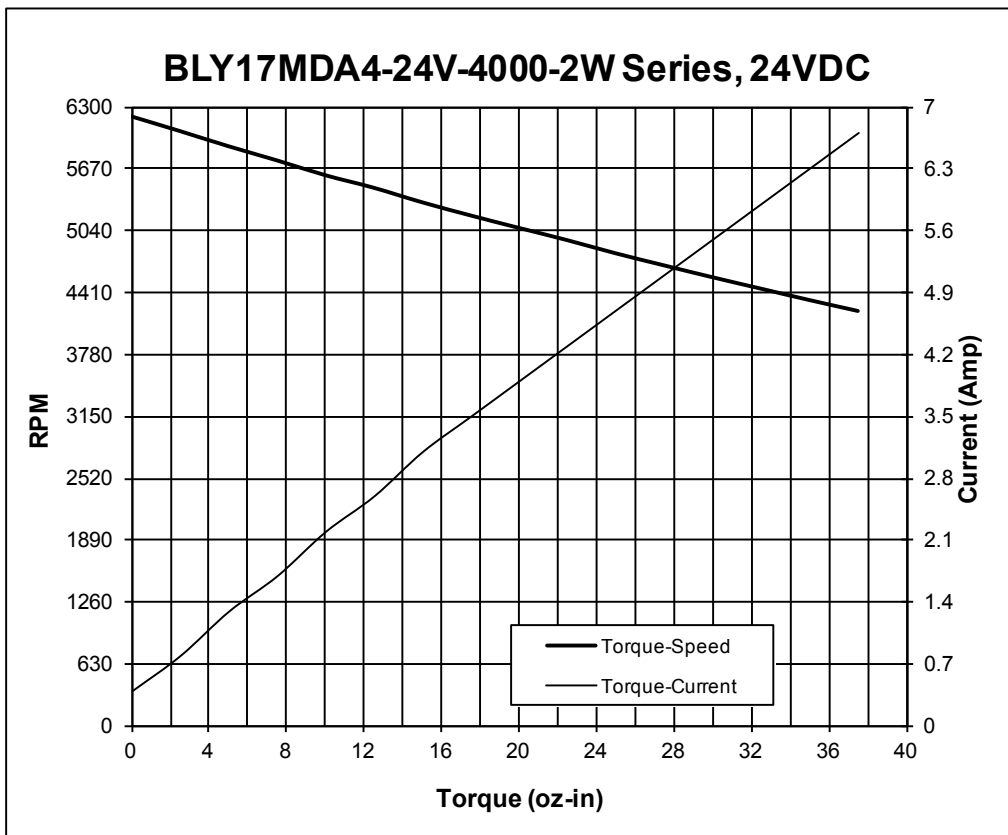
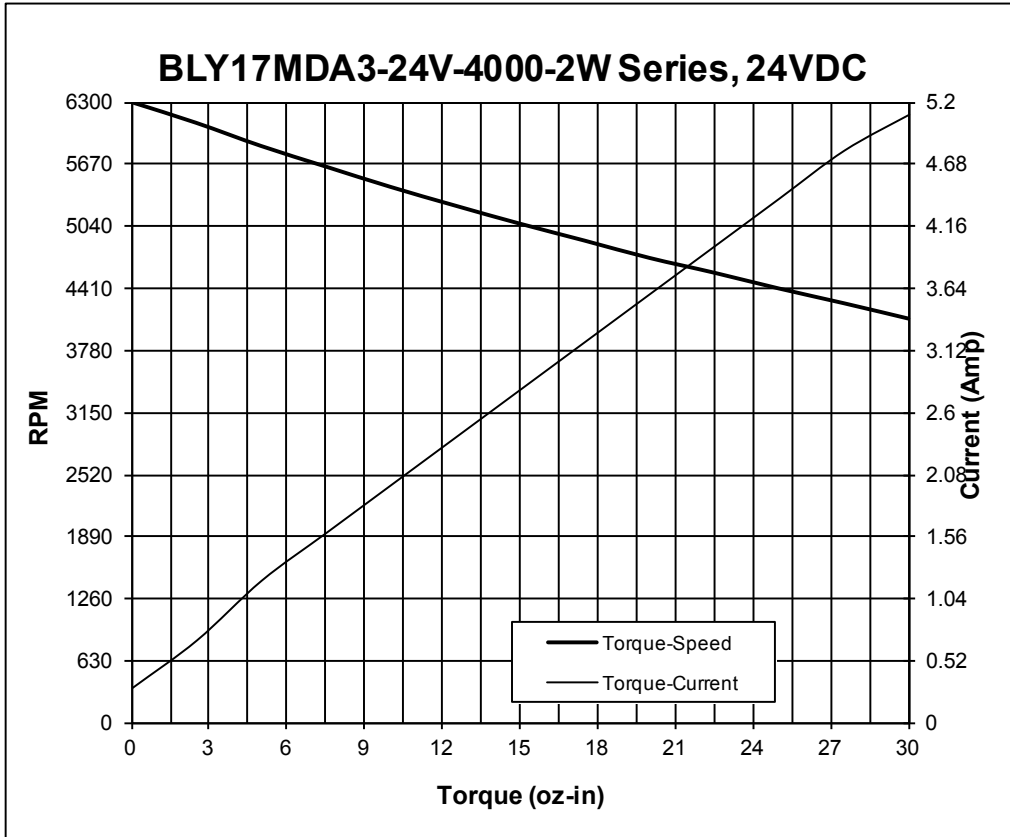
Hook-up Diagram



Torque Speed Curve



Torque Speed Curve Continued



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TECHNICAL SUPPORT

If you should require technical support or if you have problems using any of the equipment covered by this manual, please read the manual completely to see if it will answer the questions you have. If you need assistance beyond what this manual can provide, contact your Local Distributor where you purchased the unit, or contact the factory direct.

ANAHEIM AUTOMATION