

42DMW61 NEMA17 Brushless Motor with 15:1 Gearbox



The DCM4102 is a 24 volt brushless DC motor, generating 15 Kg-cm of torque at 260 RPM.

Brushless DC motors provide convenient position and velocity control through the use of their built in hall-effect sensor. They run quieter and last longer than their brushed counterparts. The 15:1 planetary gearbox on this motor results in higher torque at the cost of speed.

Connection

This motor must be controlled by a brushless DC motor controller that has the capability to both send control signals to the three motor wires, and also read the hall-effect feedback from the other five wires. Have a look at the Compatible Products tab for a list of compatible Phidget controllers.

Comes Packaged with



This motor comes with a 5-Pin molex connector soldered to the hall effect wires, and ferrules crimped onto the motor wires so it can quickly and easily be connected to the Brushless DC Motor Phidget as shown in the functional picture.

Product Specifications

Motor Properties

| | |
|---------------------------|---------------------------|
| Motor Type | Brushless DC Motor |
| Number of Poles | 8 |
| Manufacturer Part Number | 42JXG50K(15)/42DMW61-2440 |
| Output Power (Mechanical) | 50 W |

Rated Torque 15.3 kg·cm

Maximum Speed at Rated Voltage 260 RPM

Electrical Properties

Rated Current 3.5 A

Rated Voltage 24 V DC

Coil Resistance 740 mΩ

Physical Properties

Mounting Plate Size 17

Operating Temperature Min -20 °C

Operating Temperature Max 40 °C

Gearbox Properties

Gearbox Type Planetary Gearbox

Gear Ratio 15 : 1