

42DMW61 NEMA17 Brushless Motor with 106:1 Gearbox



The DCM4105 is a 24 volt brushless DC motor, generating 190 Kg-cm of torque at 38 RPM. The shaft is equipped with a 4mm key to improve coupling.

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 106:1 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	42JXGT200K(106)/42DMW61-2440
Output Power (Mechanical)	50 W

Rated Torque 193.7 kg·cm

Maximum Speed at Rated Voltage 38 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 106 : 1