

57DMWH75 NEMA23 Brushless Motor with 23:1 Gearbox



The DCM4109 is a 24 volt brushless DC motor, generating 56 Kg-cm of torque at 170 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 23:1 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	4
Manufacturer Part Number	56JXE300K(23)/57DMWH75-2440
Output Power (Mechanical)	115 W

Rated Torque 57.1 kg·cm

Maximum Speed at Rated Voltage 170 RPM

Electrical Properties

Rated Current 4.5 A

Rated Voltage 30 V DC

Coil Resistance 900 mΩ

Physical Properties

Mounting Plate Size 23

Operating Temperature Min -20 °C

Operating Temperature Max 40 °C

Gearbox Properties

Gearbox Type Planetary Gearbox

Gear Ratio 23 : 1