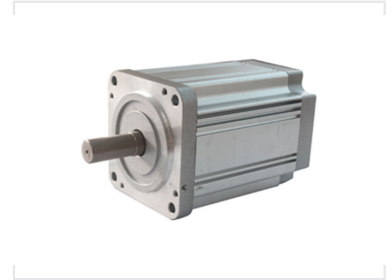


80 Series Brushless DC Motor

This brushless DC motor provides high torque up to 1.0Nm. It features a wide speed range, high efficiency, and long service life.



Overview

High-Performance 80 Series BLDC Motor

The 80 Series Brushless DC Motor is engineered for high-torque applications, delivering up to 1.0Nm of torque with exceptional efficiency and a long service life. Designed for versatility, it features a wide speed range and robust construction, making it ideal for robotics, automation, and precision motion control. This motor offers reliable performance with minimal maintenance requirements in demanding industrial environments.

Key Performance Metrics

Performance Highlights

24 V

Rated Voltage

3000 rpm

Rated Speed

1 Nm

Max Rated Torque

4 P

Number of Poles

Electrical Specification

Model Comparison

Model	Rated Power (W)	Rated Torque (Nm)	Rated Current (A)	Weight (kg)	Length (mm)
80DMW85-2430	100	0.32	5.2	1.6	85
80DMW105-2430	200	0.65	10.5	2.2	105
80DMW125-2430	300	1	15	3	125

General Specification

Insulation Class

Class B

Winding Type

Star

Hall Effect Angle

120 degree

Shaft Run Out

0.025 mm

Dielectric Strength

500VDC for one minute

Ambient Temperature

-20 to +40

Wire Diagram

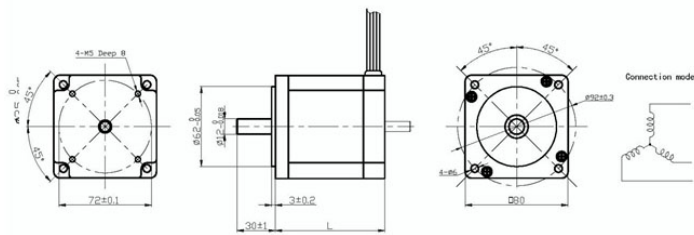
Phase Wiring (18AWG)

- Phase U: Red
- Phase V: Yellow
- Phase W: Black

Hall Sensor Wiring (26AWG)

- +5V: Red
- Hall A: Blue
- Hall B: Green
- Hall C: White
- GND: Black

Physical Dimensions



Detailed mechanical dimensions and connection diagram for the 80 series motor housing and shaft.

Mechanical Constants

- Flange Size: 72 ± 0.1 mm
- Body Diameter: $\varnothing 62$ mm
- Shaft Diameter: $\varnothing 12$ mm
- Mounting: 4-M5 Holes (8mm depth)