

57mm Brushless DC Gear Motor

This 57mm brushless DC gear motor offers high power density and quick reaction time. It is suitable for CNC machines, robotics, and automation applications.



Overview

High-Performance 57mm Brushless DC Gear Motor

This 57mm series brushless DC motor offers high power density and a long service life, making it an ideal replacement for traditional AC or brushed DC motors in energy-saving applications. It features a permanent magnet construction that ensures high efficiency, low noise, and spark-free operation even in demanding environments. Designed for precision motion control, it is suitable for CNC machinery, medical equipment, and industrial automation where reliability and quick reaction times are critical.

Performance Highlights

Key Performance Metrics

3000 RPM

Max Rated Speed

24 VDC

Operating Voltage

8

Number of Poles

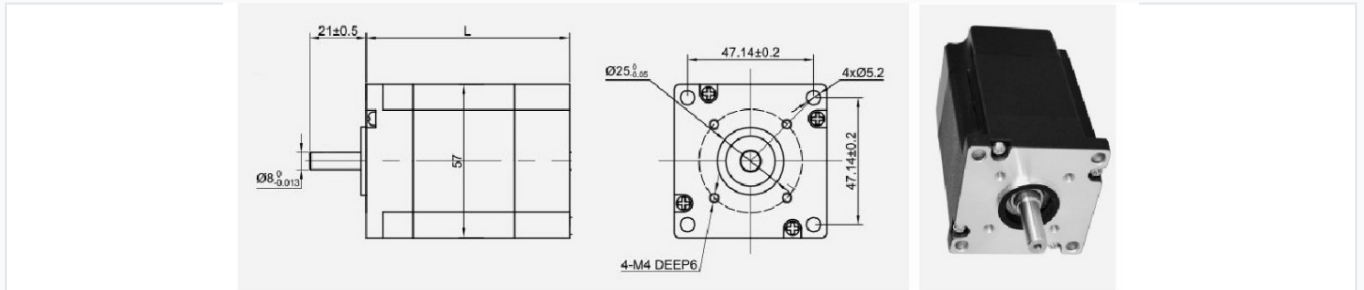
Technical Specifications

Comprehensive performance comparison across the 57mm brushless motor series.

Model Performance Data

Model Number	Rated Power (W)	Rated Speed (rpm)	Rated Torque (mN-m)	Body Length (mm)	Weight (Kg)
57-BLB0B002104RN-01	21	1000	200	59	0.6
57-BLB0B006304RN-01	63	3000	200	59	0.6
57-BLB1B004104RN-01	42	1000	400	80	1
57-BLB1B012304RN-01	125	3000	400	80	1
57-BLB2B006104RN-01	62	1000	600	101	1.5
57-BLB2B018304RN-01	188	3000	600	101	1.5

Physical & Mechanical



Precise mechanical dimensions including 57mm frame size and 8mm shaft diameter.

Frame Size	57 mm
Shaft Diameter	8 mm
Mounting Configuration	Square Flange with 4-M4 Tapped Holes

Environmental & Protection

Protection Rating

IP40 Standard • IP65 Optional • Waterproof

Insulation Class

Class B, Class F

Applications

Target Applications

- CNC Machine Tools
- Robotics & Automation
- Medical Equipment
- Home Appliances
- Electric Bicycles
- Industrial Fans

Certifications

Compliance

CE, CCC

Operational Features

Control Capabilities

- Closed-loop constant speed control
- Soft-start capability
- Fast braking control
- Overvoltage & Undervoltage protection
- Overheating & Overcurrent protection