

Brushless DC Gear Motor - 42mm Series

This brushless DC gear motor features advantages such as high power density, quick reaction, and low interference. It can be matched with tower reducers and worm gearboxes for various applications.



Overview

42mm Series High-Performance Brushless DC Motor

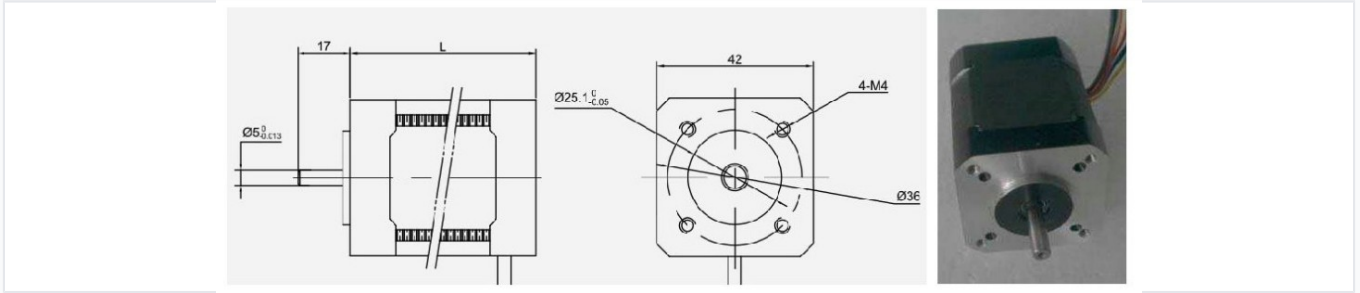
The 42mm Series Brushless DC Gear Motor is designed for high-performance motion control applications requiring energy efficiency and long service life. Featuring a permanent magnet construction and brushless commutation, it eliminates spark interference and reduces maintenance needs. This versatile motor is suitable for a wide range of industrial and domestic uses, including CNC machine tools, medical equipment, and home appliances.

Key Features

Core Advantages

- High power density and small moment of inertia
- Energy-saving permanent magnet rotor design
- Low noise operation without brush sparks
- Integrated protection: overvoltage, undervoltage, and overheating
- Compatible with various reducers (tower, worm gearbox)

Technical Specifications



Technical drawing showing the 42mm square flange, 5mm shaft diameter, and mounting hole patterns.

Performance Metrics

8000 RPM

Max Speed

105 W

Max Power

250 mN·m

Max Torque

Protection Rating

IP40 Standard • IP65 Optional • Waterproof

Voltage Options

24VDC, 36VDC

Insulation Class

Class B & Class F available

Work Duty

S1 (Continuous), S2, or S3

Product Variants

Model Specifications Table

Model Number	Power (W)	Speed (RPM)	Torque (mN·m)	Length (mm)
42BLB1B001204RN-01	13	2000	63	41
42BLB0C006304RN-01	62	3000	201	51
42BLB2B010804RN-01	104	8000	125	61
42BLB4B010404RN-01	105	4000	250	101

Applications

Common Applications

CNC Machine Tools, Robotics, Home Appliances, Electric Bicycles, Medical Equipment, Industrial Control

Certifications

Certifications

CCC • CE