

# 130 Series Brushless DC Motor

This brushless DC motor delivers high torque up to 14.5Nm. It offers a power output of up to 4500W.



## Overview

### High-Performance Industrial BLDC Motor

The 130 Series Brushless DC Motor is designed for demanding industrial applications such as robotics, automation, and precision motion control. It offers high torque density up to 14.5Nm and power outputs reaching 4500W, ensuring robust performance in a compact frame. With a focus on efficiency and reliability, this motor features Class B insulation and a maintenance-free brushless design suitable for various equipment integrations.

## Key Performance Metrics

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**4500 W**

Max Rated Power

**14.5 Nm**

Max Rated Torque

**3000 rpm**

Rated Speed

**72 V**

Voltage

## Technical Specifications

■ GENERAL SPECIFICATION		■ WIRE DIAGRAM		
Winding type: Star	Lead No.	Lead Color	Lead Gauge	Function
Hall effect angle: 120 degree electrical angle	1	RED		Phase U
Shaft run out: 0.025mm	2	YEL	8AWG UL1569	Phase V
Insulation Class: Class B	3	BLA		Phase W
Dielectric strength: 500VDC for one minute	4	RED		+5V
Ambient temperature: -20~+40 °C	5	BLU		Hall A
	6	GRE	28AWG UL1569	Hall B
	7	WHI		Hall C
	8	BLA		GND

■ ELECTRICAL SPECIFICATION			
Model		130DMW190-7230	130DMW240-7230
Voltage	V	72	72
Number of poles		8	8
Rated power	W	3000	4500
No load speed	rpm	3600	3600
Rated torque	Nm	9.5	14.50
Rated Speed	rpm	3000	3000
Rated Current	A	52	78
Peak Torque	Nm	28	43
Weight	Kg	10.4	13
Length	mm	190	240

Comprehensive electrical data and color-coded wiring diagram for phase and hall sensor connections.

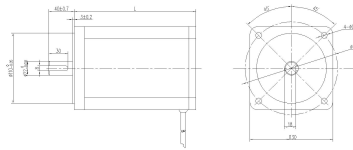
### Model Comparison Table

Model	Rated Power (W)	Rated Torque (Nm)	Rated Current (A)	Peak Torque (Nm)	Weight (Kg)	Length (mm)
130-DMW190-7230	3000	9.5	52	28	10.4	190
130-DMW240-7230	4500	14.5	78	43	13	240

## General Specifications

Insulation Class Class B	
Winding Type	Star
Hall Effect Angle	120 degree electrical angle
Shaft Run Out	0.025 mm
Dielectric Strength	500VDC for one minute
Operating Temperature	-20 to +40 °C

## Mechanical Dimensions



Detailed dimensions and mounting specifications for the 130 series motor frame.

Frame Size	130mm Square
Shaft Diameter	22 mm
Mounting Circle Diameter	145 mm

## Wiring Configuration

### Hall Sensor Wiring (26AWG)

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

Phase Wiring (8AWG)	Phase U (Red), Phase V (Yellow), Phase W (Black)
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