

## Datasheet

# RS Pro Brushless DC Motor, 24 V dc, 0.25 Nm, 5260 rpm, 4mm Shaft Diameter

RS Stock No: **892-8767**



## Product Details

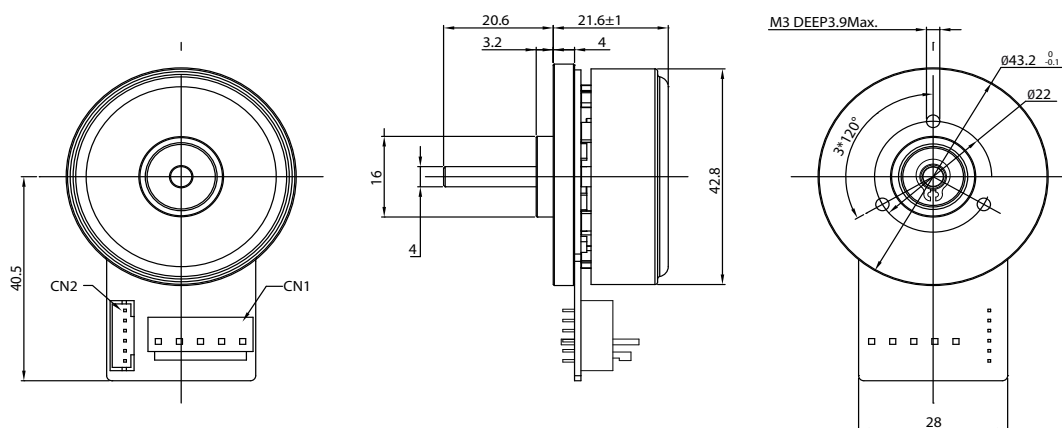
RS Pro brushless DC motor is the perfect solution for many applications due to their compact, flat design which is 45 mm diameter and a length less than 30 mm. It operates at a voltage rating of 24 V dc. The permanent magnets are located on the external rotor that rotates around the internal stator with the windings. In addition to the shorter design, the advantage of this construction compared to internal rotor motors comes from having the same output with lower torque ripple due to the rotor's higher moment of inertia.

## Features and Benefits

- Shaft diameter of 4 mm
- Class B insulation
- Hall effect sensors with 120° electrical angle
- Supply voltage of 24 V dc
- 5260 rpm output speed
- Brushless technology
- Current rating of 7 A
- 0.25 Nm maximum output torque

**Specifications:**

Core Construction	Permanent Magnet
DC Motor Type	Brushless
Standards Met	CE; RoHS Compliant
Length	21 mm
Shaft Diameter	4 mm
Current Rating	7 A
Dimensions	42.8 (dia.) x 21 mm
Maximum Output Torque	0.084 Nm
Output Speed	5260 rpm
Supply Voltage	24 V dc
Peak Current	7 A
Peak Torque	0.25 Nm



## Specification

Model		8928767
1	N° OF POLE	16
2	N° OF PHASE	3
3	RATED VOLTAGE	V 24
4	RATED SPEED	RPM 5260
5	RATED TORQUE	NM 0,084
6	MAX PEAK TORQUE	NM 0,25
7	TORQUE CONSTANT	NM/A 0,033
8	LINE TO LINE RESISTANCE	Ω 0,9
9	LINE TO LINE INDUCTANCE	MH 0,425
10	MAX PEAK CURRENT	A 7
11	LENGTH	MM 21
12	ROTOR INERTIA	G-CM <sup>2</sup> 135
13	WEIGHT	KG 0,12

## Characteristics

**HALL EFFECT ANGLE**  
120 ° ELECTRIC ANGLE

**SHAFT RUN OUT**  
0,03 MM

**INSULATION CLASS**  
B

**RADIAL PLAY**  
0,02 MM (450 G LOAD)

**AXIAL PLAY**  
0,08 MM (450 G LOAD)

**MAX RADIAL FORCE**  
28N 10MM FROM FLANGE

**MAX AXIAL FORCE**  
10N

**DIELECTRIC STRENGTH**  
500 VDC FOR ONE MINUTE

**INSULATION RESISTANCE**  
100 M OHM MIN. 500 VDC

## Connection

PIN N°	CONNECTOR	FUNCTION
1	JST B5P	GND
2	JST B5P	PHASE U
3	JST B5P	PHASE V
4	JST B5P	PHASE W
5	JST B5P	GND
1	JST B6B	GND
2	JST B6B	.+ 5V DC
3	JST B6B	HALL A
4	JST B6B	HALL B
5	JST B6B	HALL C
6	JST B6B	GND