

## Datasheet

# RS Pro Brushless DC Motor, 24 V dc, 1.11 Nm, 3500 rpm, 8mm Shaft Diameter

RS Stock No: **892-8773**



## Product Details

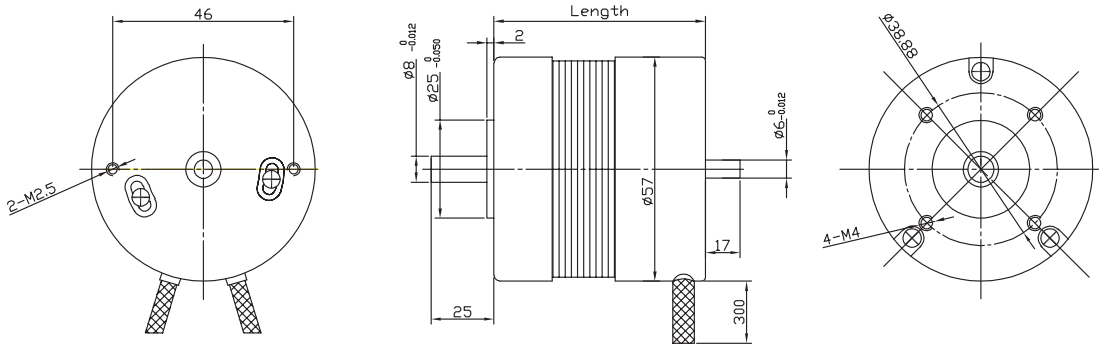
RS Pro brushless DC motor has a hall effect sensor with 120° electrical angle. It operates at a voltage rating of 24 V dc. This motor belongs to the range of motors with integrated communication electronics.

## Features and Benefits

- Shaft diameter of 8 mm
- Class B insulation
- Speed control feedback via hall sensor
- Supply voltage of 24 V dc
- 3500 rpm output speed
- Different voltage versions
- Current rating of 24 A
- 1.11 Nm maximum output torque

**Specifications:**

DC Motor Type	Brushless
Standards Met	CE; RoHS Compliant
Length	68.6 mm
Shaft Diameter	8 mm
Current Rating	24 A
Dimensions	38.8 (dia.) x 68.6 mm
Maximum Output Torque	0.37 Nm
Output Speed	3500 rpm
Supply Voltage	24 V dc
Peak Current	24 A
Peak Torque	1.1 Nm



### Characteristics

HALL EFFECT ANGLE  
120 ° ELECTRIC ANGLE

SHAFT RUN OUT  
0,025 MM

INSULATION CLASS  
B

RADIAL PLAY  
0,02 MM (450 G LOAD)

AXIAL PLAY  
0,08 MM (450 G LOAD)

MAX RADIAL FORCE  
75 N (10 MM FROM FLANGE)

MAX AXIAL FORCE  
15 N

DIELECTRIC STRENGTH  
500 VDC FOR ONE MINUTE

INSULATION RESISTANCE  
100 M OHM MIN. 500 VDC

### Specification

Model		8928773	8928782
1	N° OF POLE	6	6
2	N° OF PHASE	3	3
3	RATED VOLTAGE V	24	24
4	RATED SPEED RPM	3500	3500
5	RATED TORQUE NM	0,23	0,37
6	MAX PEAK TORQUE NM	0,69	1,11
7	TORQUE CONSTANT NM/A	0,045	0,046
8	LINE TO LINE RESISTANCE Ω	0,57	0,24
9	LINE TO LINE INDUCTANCE MH	0,63	0,29
10	MAX PEAK CURRENT A	15	24
11	LENGTH MM	53,6	68,6
12	ROTOR INERTIA G-CM <sup>2</sup>	75	105
13	WEIGHT KG	0,52	0,65

### Connection

LEAD N°	COLOR	GAUGE	FUNCTION
1	RED	UL1332 AWG22	VCC HALLSENSOR
-	-	-	+5 TO +24 VDC
2	BLUE	UL1332 AWG22	HALL A
3	GREEN	UL1332 AWG22	HALL B
4	WHITE	UL1332 AWG22	HALL C
5	BLACK	UL1332 AWG22	GND HALL
			SENSOR GROUND
6	YELLOW	UL1332 AWG18	PHASE U
7	RED	UL1332 AWG18	PHASE V
8	BLACK	UL1332 AWG18	PHASE W