

## Datasheet

# RS Pro Brushless DC Motor, 24 V dc, 0.05 Nm, 3500 rpm, 6.2mm Shaft Diameter

RS Stock No: **892-8751**



## Product Details

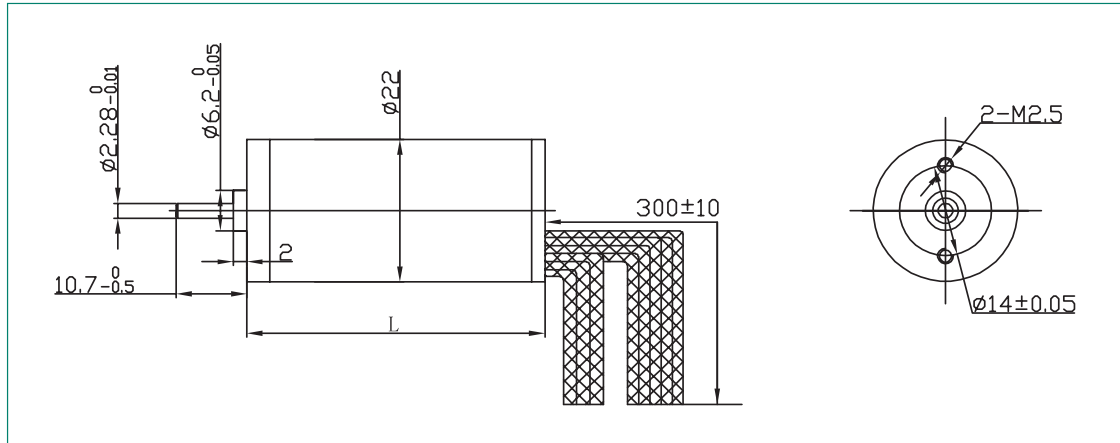
RS Pro brushless DC motor has a hall effect sensor with 120° electrical angle. It operates at a voltage rating of 24 V dc. This motor belongs to the range of motors with integrated communication electronics.

## Features and Benefits

- Shaft diameter of 6.2 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 1.5 A
- 0.05 Nm maximum output torque

**Specifications:**

DC Motor Type	Brushless
Standards Met	CE; RoHS Compliant
Length	70 mm
Shaft Diameter	6.2 mm
Current Rating	1.5 A
Dimensions	22 (dia.) x 70 mm
Maximum Output Torque	0.022 Nm
Output Speed	3500 rpm
Supply Voltage	24 V dc
Peak Current	1.5 A
Peak Torque	0.05 Nm



### Specification

Model		8928757	8928751
1	N° OF POLE	8	8
2	N° OF PHASE	3	3
3	RATED VOLTAGE V	24	24
4	RATED SPEED RPM	4600	3500
5	RATED TORQUE NM	0,008	0,022
6	MAX PEAK TORQUE NM	0,021	0,05
7	TORQUE CONSTANT NM/A	0,030	0,035
8	LINE TO LINE RESISTANCE $\Omega$	23	11,8
9	LINE TO LINE INDUCTANCE MH	6,2	4,2
10	MAX PEAK CURRENT A	1,1	1,5
11	LENGTH MM	45	70
12	ROTOR INERTIA G-CM <sup>2</sup>	0,66	1,32
13	WEIGHT KG	0,07	0,12

### 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  
10N 10MM FROM FLANGE

MAX AXIAL FORCE  
2N

DIELECTRIC STRENGTH  
500 VDC FOR ONE MINUTE

INSULATION RESISTANCE  
100 M OHM MIN. 500 VDC

### Connection

LEAD N°	COLOR	GAUGE	FUNCTION
1	YELLOW	UL1430 AWG28	Vcc HALL SENSOR +5 TO +24 Vdc
2	BLUE	UL1430 AWG28	HALL A
3	ORANGE	UL1430 AWG28	HALL B
4	BROWN	UL1430 AWG28	HALL C
5	WHITE	UL1430 AWG28	GND HALL SENSOR GROUND
6	GREEN	UL1430 AWG26	PHASE U
7	RED	UL1430 AWG26	PHASE V
8	BLACK	UL1430 AWG26	PHASE W

