

#### **FEATURES**

- High Torque Stepper Motors
- Hybrid technologies
- Permanent magnet

## RS PRO Hybrid, Permanent Magnet Stepper Stepper Motor, 3.2 V, 6.35mm Shaft Diameter

RS Stock No.: 535-0445



RS Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.



#### **Product Description**

High Torque Hybrid Stepper Motors are motion systems allowing to have a high positioning precision. With their high power already at low speed, their stall torque and the possibility to divide the steps in micro steps, stepper motors can provide direct and precise motions in a small volume

#### **General Specifications**

Stepper Motor Type	Hybrid, Permanent Magnet Stepper
Step Angle	1.8°
Step Angle Accuracy (Full Step, No Load)	±5%
Holding Torque	189Ncm
Detent Torque	72mNm
Output Speed	186rpm
Number of Pole Pairs	1
Applications	Floppy disk drives, flatbed scanners, computer printers, plotters, slot machines
Number Of Leads	4



#### **Electrical Specifications**

Voltage Rating	3.2V
Current Per Phase	2.8A
Number Of Wires	4
Winding Arrangement	Bipolar; Parallel; Series; Unipolar; Unparallel
Resistance Per Phase	1.13Ohm
Resistance Accuracy	±10%
Inductance Per Phase	3.6mH
Inductance Accuracy	±20%
Rotor Inertia	480g-cm <sup>2</sup>
Insulation Resistance	100MOhm min. 500VDC
Dielectric Strength	500VAC for one minute
Insulation Class	В

#### **Mechanical Specifications**

Shaft Diameter	6.35mm
Shaft Length	22mm
Depth	76mm
Frame Size	28mm x 28mm
Weight	1kg
Shaft Radial Play	0.02 Max. (450G Load)
Shaft Axial Play	0.08 Max. (450G Load)
Maximum Radial Force	28N (20mm from front flange)
Maximum Axial Force	10N

#### **Operation Environment Specifications**

Maximum Temperature Rise	80°C
Ambient Temperature	-20°C to 50°C
Ambient Humidity	85% Max. (No Condensation)

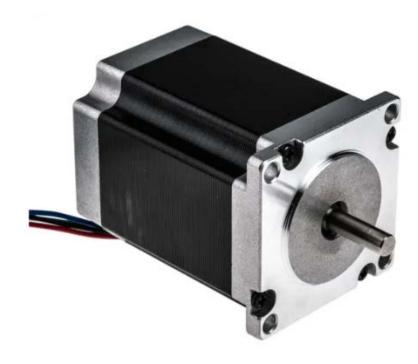


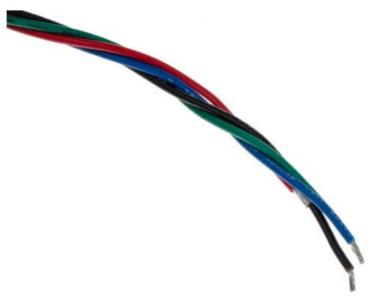
#### **Protection Category**

IP Rating	IP65; IP54
IF Nating	1F 03, 1F 3 <del>4</del>

### Approvals

Compliance/Certifications	CE / CSA / UL94-V0
Standards Met	NEMA-17, RoHS Compliant

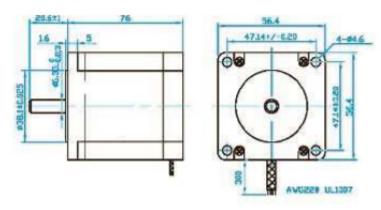






# 57mm 1.8' HIGH TORQUE STEPPER RS stock number 535-0445 200 STEP

Dimensions in mm



#### **Speed V Torque Characteristics**

