

## FEATURES

- Step angle of 0.9°
- Holding torque of 0.44 Nm
- Four-wire bipolar winding
- Voltage rating of 2.8 V
- Frame size of 42.3 x 42.3 mm
- Hybrid stepper motor type
- Shaft diameter of 5 mm
- Current rating of 1.68 A
- Shaft length of 24 mm
- Depth of 47 mm
- Resistance per phase of 1.65  $\Omega$
- RoHS (Restriction of Hazardous Substances) compliant product

## RS PRO Hybrid Stepper Stepper Motor, 2.8 V, 5mm Shaft Diameter

RS Stock No.: 535-0401



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

The RS PRO hybrid stepper motor allows you to make precise and controlled movements with electric devices. Stepper motors are brushless assemblies that divide a full motor rotation into several smaller, equal steps, for greater precision and higher efficiency at lower speeds. A hybrid stepper model combines both permanent magnet and variable reluctance motor technology to maximize power in small devices.

## General Specifications

<b>Stepper Motor Type</b>	Hybrid Stepper
<b>Step Angle</b>	0.9°
<b>Step Angle Accuracy (Full Step, No Load)</b>	±5%
<b>Holding Torque</b>	0.44Nm
<b>Detent Torque</b>	25mHm
<b>Applications</b>	Floppy disk drives, flatbed scanners, computer printers, plotters, slot machines

## Electrical Specifications

<b>Voltage Rating</b>	2.8 V
<b>Current Per Phase</b>	1.68 A
<b>Number Of Wires</b>	4
<b>Resistance Per Phase</b>	1.65 Ω
<b>Wiring Arrangement</b>	Bipolar
<b>Resistance Accuracy</b>	±10%
<b>Inductance Per Phase</b>	6.7mH
<b>Inductance Accuracy</b>	±20%
<b>Rotor Inertia</b>	68kg-cm <sup>2</sup>
<b>Insulation Resistance</b>	100 M Ω min., 500 Vdc
<b>Dielectric Strength</b>	500 Vac for one minute

## Mechanical Specifications

Shaft Diameter	5mm
Shaft Length	24mm
Depth	47mm
Frame Size	42.3mm x 42.3mm
Weight	0.35kg
Shaft Radial Play	0.06 max. (450 g-load)
Shaft Axial Play	0.08 Max. (450G Load)

## Operation Environment Specifications

Maximum Temperature Rise	80°C
Ambient Temperature	-10°C to +50°C

## Approvals

Compliance/Certifications	EN61340
Standards Met	RoHS Compliant



