

Bipolar Stepper Motor with Planet Gear Box (18kg.cm)

Product Code: FIT0349

Supplier: DFRobot

Introduction

This bipolar stepper motor with planet gear box (gear ratio: 5.18) uses a standard 8mm-diameter D type output shaft, and has a 1.8° step angle (200 steps/revolution). Each phase draws 1.6 A at 2.78 V, allowing for a holding torque of 18kg·cm (176N·cm). The motor has a body dimension of 42mm square and 40mm in length, while the planet gear box is 36mm in diameter and 27mm in length. The motor has four color-coded wires terminated with bare leads: black and green connect to one coil; red and blue connect to the other. It can be easily mounted with 4 M3 threaded holes.

Specifications:

- Model No:42BYGH40-170-4A
- Step Angle (degrees) :1.8
- 2 Phase
- Rated Voltage : 12V
- Rated Current : 1.6A@2.78V ,0.37A@12V Holding Torque : 3.5kg*cm (48.6 oz/in)
- Hold Torque with Gearbox: 18kg·cm (176N·cm)
- Gear Ratio: 5.18:1
- Winding resistance: 1.5 Ω
- Winding inductance: 2.5 mH
- Max flux linkage: 1.8 Vs
- Step Angle Accuracy : $\pm 5\%$ (full step, no load)
- Resistance Accuracy: $\pm 10\%$
- Inductance Accuracy: $\pm 20\%$
- Temperature Rise: 80°C Max.(rated current,2 phase on)
- Ambient Temperature: -20°C~+50°C
- Insulation Class: B
- Dimension: 42×42×40mm
- Mounting: 4 x M3
- Mounting Hole Diameter $\Phi 28$

