# imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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### Hybrid Stepper Motor for 3D Printer (3.5kg) SKU: FIT0278



#### **INTRODUCTION**

This is another DFRobot customized high quality product. It is a simple 2 phases hybrid stepper motor. It features 3.5kg high torque output. It is applied in most CNC machine or 3D printer such as makerbot and ultimaker. If you want to make your own CNC or 3D printer, this motor is the most suitable one. Usually, a CNC machine requires 3 motors and a 3D Printer requires 4.

Trying to find the right stepper motor is not an easy job. There are so many stepper motor in the market with variant quality and price. After testing more than 10 different stepper motors, we finally had one that meets our quality and price requirements. This motor has been passed DFRobot Lab 3 months continous running tests. It was installed on our 3D printer for 24x5 running for 3 months, and it is still servering its role. For that reason, we highly recommend this motor to 3D printer community.

It comes with 4 pin JST connector which is compatible with ultimaker control board, the cable length is 50cm.

#### **SPECIFICATION**

- Model No:42BYGH1861A-C
- Step Angle (degrees) :1.8
- 2 Phase
- Rated Voltage : 3.4V
- Current : 1.7A/PHASE
- Holding Torque : 3.5kg\*cm (48.6 oz/in)
- Detent Torque: 180g\*cm
- 5mm (0.2") Diameter Drive Shaft
- Winding resistance: 2±10% Ω/PHASE
- Winding inductance: 2±20% mH/PHASE
- Max flux linkage: 1.8 Vs
- Maximum Detent Torque: 0.016 N.M
- Total inertia (kg.m.m): 3.5 Kg.m.m
- Total friction (kg.m/s): 4 Kg.m/s
- Step Angle Accuracy : ±5% (full step, no load)
- Temperature Rise: 80°C Max.(rated current,2 phase on)
- Ambient Temperature: -20°C~+50°C
- Isulation Class: B
- Life: 6000 hours
- Cable Length:50cm
- Weight: 270 gram
- Size:42x42x40mm (1.65x1.65x1.57")

#### SHIPPING LIST

- Stepper Motor (42BYGH1861A-C) x1
- 500mm (19.69") XH 2.54 cable x1