



Stepper motor - NEMA-17 size - 200 steps/rev, 12V 350mA PRODUCT ID: 324

A stepper motor to satisfy all your robotics needs! This 4-wire bipolar stepper has 1.8° per step for smooth motion and a nice holding torque. The motor was specified to have a max current of 350mA so that it could be driven easily with an Adafruit motor shield for Arduino (or other motor driver) and a wall adapter or lead-acid battery.

Some nice details include a ready-to-go cable and a machined drive shaft (so you can easily attach stuff). We drove it with an Adafruit motor shield for Arduino and it hummed along nicely at 50 RPM. To connect to our shield, put the wires in this order: Red, Yellow, skip ground, Green, Brown (or Gray).

## **TECHNICAL DETAILS**

200 steps per revolution, 1.8 degrees

Coil #1: Red & Yellow wire pair. Coil #2 Green & Brown/Gray wire pair.

Bipolar stepper, requires 2 full H-bridges!

4-wire, 8 inch leads

42mm/1.65" square body

31mm/1.22" square mounting holes, 3mm metric screws (M3)

5mm diameter drive shaft, 24mm long, with a machined flat

12V rated voltage (you can drive it at a lower voltage, but the torque will drop) at 350mA max current

28 oz\*in, 20 N\*cm, 2 Kg\*cm holding torque per phase

35 ohms per winding