

PhidgetStepper Bipolar HC



Note: The 1067_0B is identical to the 1067_0, except that you have the option of whether you want to include the USB cable.

The 1067 “ PhidgetStepper Bipolar HC allows you to control the position, velocity, and acceleration of one bipolar stepper motor. This is the product you want to use to control larger industrial steppers or for applications that need a lot of torque.

The 1067 can also be used in applications that require very precise positioning. It uses micro-stepping at all times to ensure smooth acceleration.

This board is USB isolated, protecting your system from ground loops, and comes with a built-in replacable ATP Blade Terminal fuse to protect against an over-current scenario.

Comes Packaged with

- A Hardware mounting kit (4 nuts and bolts (M3), 4 plastic spacers)
- A 5 Amp ATP Blade Terminal fuse

Warning

Make sure the power supply is unplugged before attaching or removing wires from the terminal blocks. Failure to do so could cause permanent damage to the PhidgetStepper board.

When using larger motors with heavy loads or high speeds, you should take caution because the back EMF generated when stalling or changing directions could damage the motor controller. As a rule of thumb, if the kinetic energy of your application exceeds 10 joules, you are at risk of damaging the controller. Feel free to contact us for advice for such applications.

Related Videos

Product Specifications

Controller Properties

| | |
|---------------------------------|---|
| API Object Name | Stepper |
| Motor Type | Bipolar Stepper |
| Number of Motor Ports | 1 |
| Motor Position Resolution | ¹ □ ₁₆ Step (40-Bit Signed) |
| Position Max | ?± 1E+15 1/16 steps |
| Stepper Velocity Resolution | 1 1/16 steps/sec |
| Stepper Velocity Max | 250000 1/16 steps/sec |
| Stepper Acceleration Resolution | 1 1/16 steps/sec? ² |
| Stepper Acceleration Min | 2 1/16 steps/sec? ² |
| Stepper Acceleration Max | 1E+07 1/16 steps/sec? ² |

Board Properties

| | |
|-----------------|----------------|
| Controlled By | USB (Mini-USB) |
| API Object Name | Stepper |

Electrical Properties

| | |
|--------------------------------|------------|
| Available Current per Coil Max | 4 A |
| Supply Voltage Min | 10 V DC |
| Supply Voltage Max | 30 V DC |
| Current Consumption Min | 25 mA |
| USB Speed | Full Speed |

Physical Properties

| | |
|--|-----------------------------|
| Power Jack | 5.5 x 2.1mm Center Positive |
| Recommended Wire Size (Motor Terminal) | 12 to 26 AWG |
| Recommended Wire Size (Power Terminal) | 12 to 26 AWG |
| Operating Temperature Min | -20 ?°C |
| Operating Temperature Max | 85 ?°C |