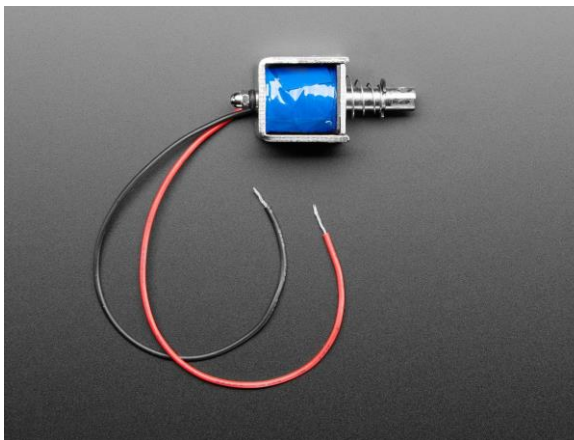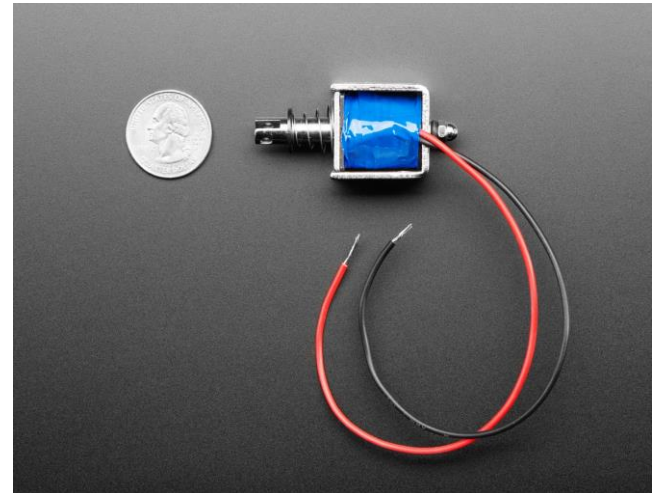# Medium Push-Pull Solenoid - 5V or 6V

PRODUCT ID: 3992

DESCRIPTION

Solenoids are basically electromagnets: they are made of a big coil of copper wire with an armature (a slug of metal) in the middle. When the coil is energized, the slug is pulled into the center of the coil. This makes the solenoid able to pull from one end, or push from the other.

This solenoid in particular is chunkier than our little 5V one, with a 27mm long body, 10mm long throw, and a 'captive' armature with a return spring. This means that when activated with up to 6VDC, the solenoid moves and then the voltage is removed, it springs back to the original position, which is quite handy. Many lower cost solenoids are only push type or only pull type and may not have a captive armature (it'll fall out!) or don't have a return spring.

You'll need to power this here solenoid with about 6VDC (you don't have to be exact, 5 to 6V will work fine) and ka-pow, it's now a magnet. Turn off the power and it reverts back to a normal chunk of metal. Since it's a coil, you'll need to use a motor or solenoid driver with kick-back protection. These draw quite a bit of current, 800mA at 5V and 1 Amp at 6V so you'll want a good strong driver. Our Crickit boards will work well if you use a motor port

TECHNICAL DETAILS

Specs:

- 6VDC operation (please note lower voltage results in weaker/slower operation)
- Current: 6V 1A or 5V 0.8A
- Push or pull type with 10mm throw
- Armature tube dimensions:
    - Length: 55.4mm
    - Diameter: 7mm
- DC coil resistance: 6 ohms
- Wire length: approx 20cm

Product Weight: 68.0g / 2.4oz