

Micro Servo – MG90D High Torque Metal Gear

PRODUCT ID: 1143

Add more power to your robot with this metal-gear MG90D servo. The tiny little servo can rotate approximately 90 degrees (45 in each direction), and works just like the standard kinds you're used to but *smaller*. You can use any servo code, hardware or library to control these servos. Good for beginners who want to make stuff move without building a motor controller with feedback & gear box, especially since it will fit in small places. Of course, its not nearly as strong as a standard servo. Works great with the Motor Shield for Arduino, our 16-channel Servo Driver, or by just wiring up with the Servo library. Comes with a few horns and hardware.

Please note, this servo will 'hold' the position even when no signal is sent!

To control with an Arduino, we suggest connecting the orange control wire to pin 9 or 10 and using the Servo library included with the Arduino IDE (see here for an example sketch). Position "0" (1.5ms pulse) is middle, "90" (~2ms pulse) is all the way to the right, "-90" (~1ms pulse) is all the way to the left.

Note that the default servo pulse widths (usually 1ms to 2ms) may not give you a full 180 degrees of motion. In that case, check if you can set your servo controller to custom pulse lengths and try 0.75ms to 2.25ms. You can try shorter/longer pulses but be aware that if you go too far you could break your servo!

TECHNICAL DETAILS

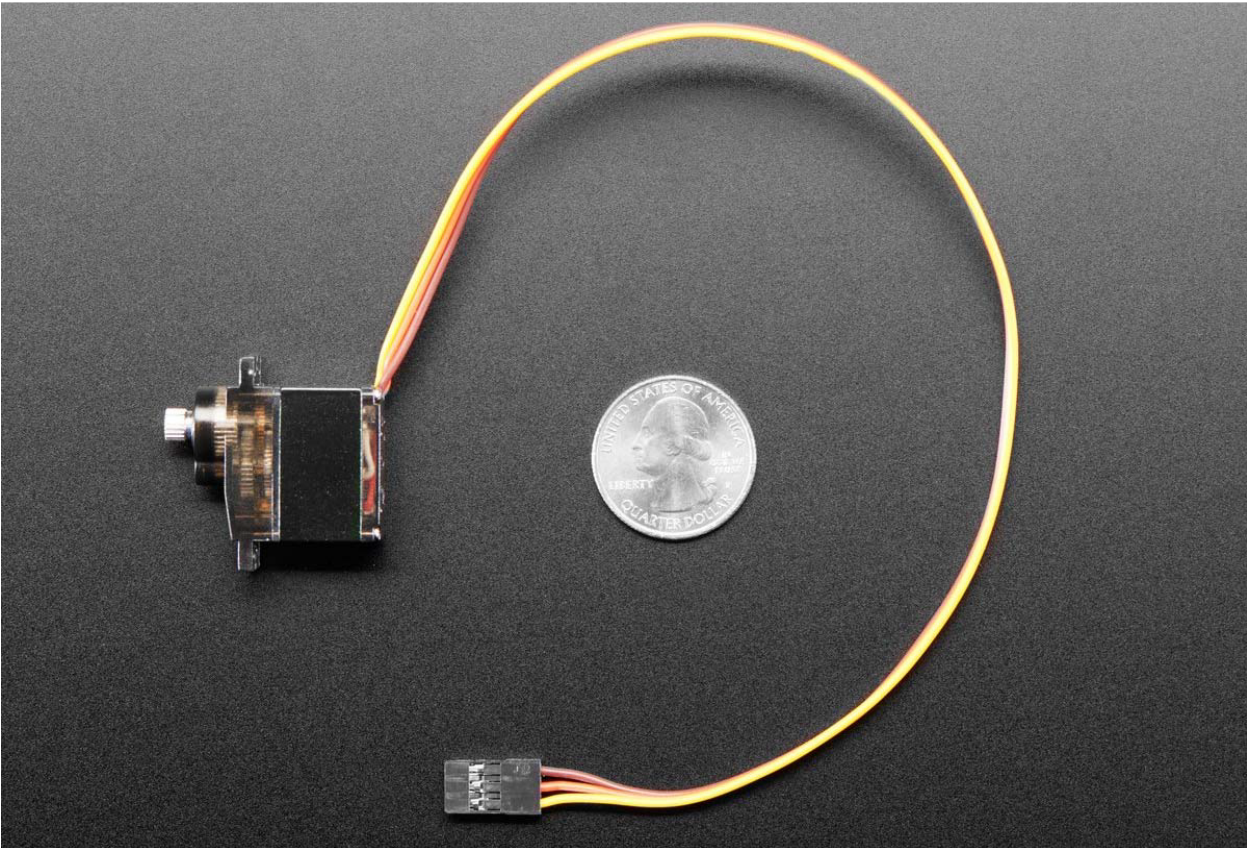
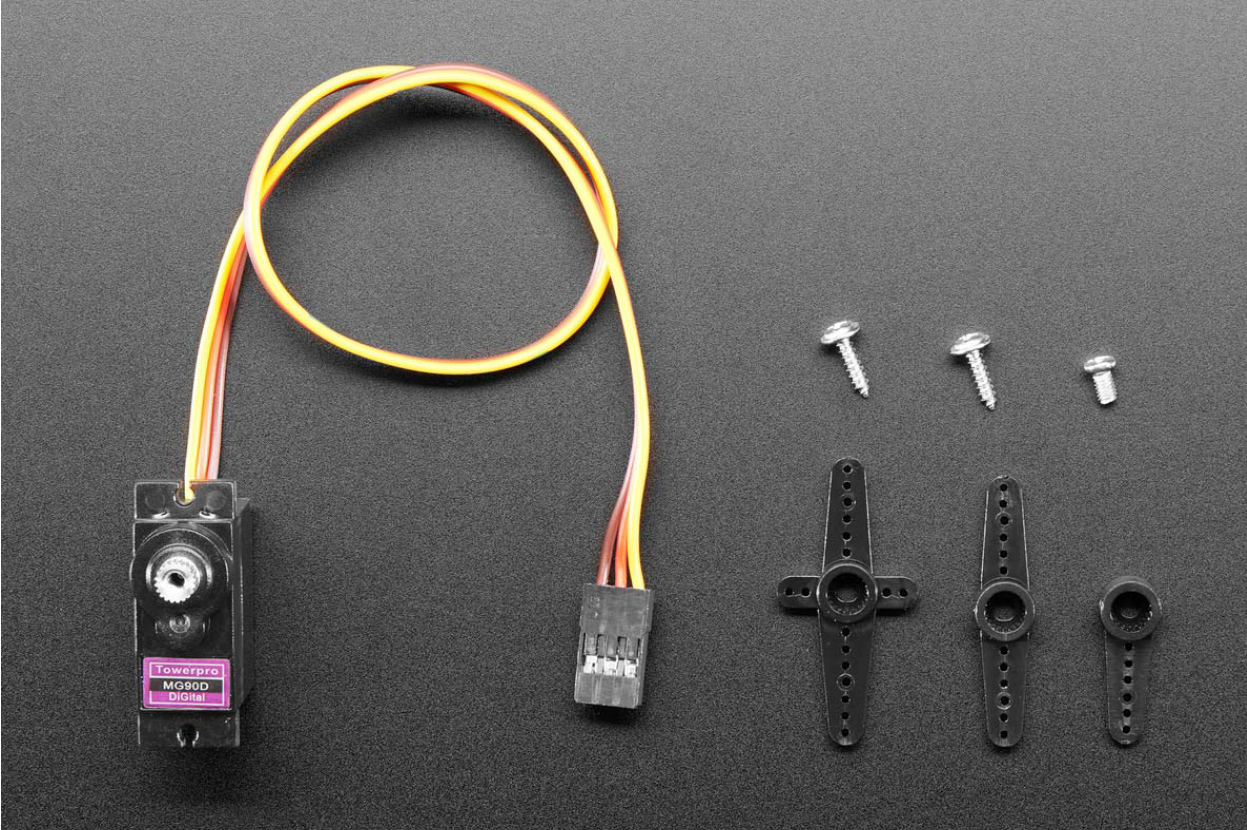
Details:

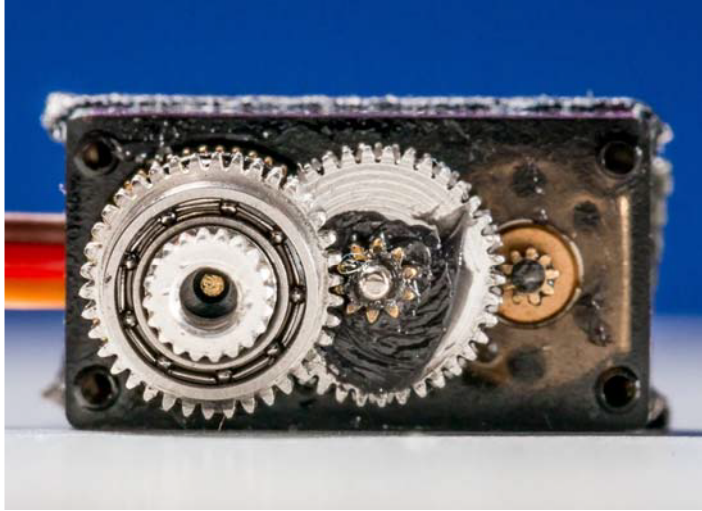
- Size : 22.8 x 12.2 x 28.5 mm
- Voltage : 4.8V to 6V DC
- Weight: 13.4 grams
- Speed : 0.1 sec/60degrees (at 4.8V), 0.08 sec/60 degrees (at 6.0V)
- Stall Torque : At 4.8V: 2.1 kg-cm / 25 oz-in. At 6.0V: 2.4 kg-cm / 30.5 oz-in
- Spline Count: 20

Revision History:

- As of November 7, 2018 this item has been updated to have a new digital 13g metal gear, with a double ball bearing servo.







<https://www.adafruit.com/product/1143/3-22-19>