Mini 360 Degree Continuous Rotation Servo FS90R

Get your robot project moving with this Feetech FS90R 360 degree continuous rotation micro servo, it weighs only 9g but can deliver 130 RPM at 6V with no load.

Code 2589

This FS90R Mini 360 Servo by Feetech is a great value multi-purpose micro size servo and it's ideal for use with micro-controller systems like the BBC microbit, Arduino, Raspberry Pi and PICAXE. It's miniature size also makes it great for use in radio controlled models and small robot projects.
This is a 360 degree continuous rotation servo. Its operation is very different to that of a standard servo. Instead of going to a specified angle, this servo will be static at a 1.5ms pulse (a trimmer is included to tweak this), a longer pulse gives forward rotation and a shorter pulse give backwards rotation.
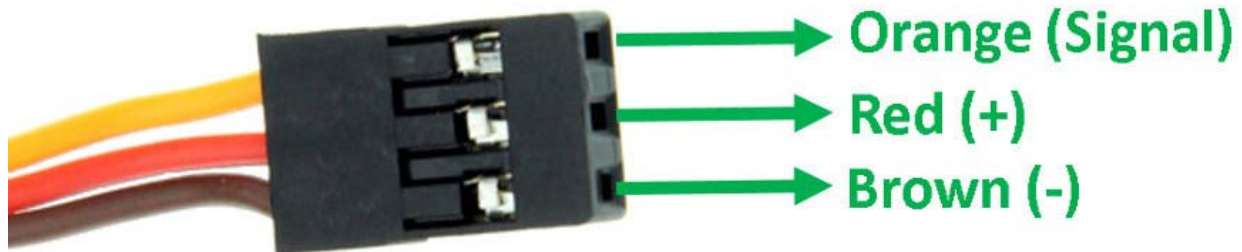
The FS90R continuous rotation servo converts standard RC servo position pulses into continuous rotation speed. The default rest point is 1.5 ms, but this can be adjusted by using a small screwdriver to turn the middle-point adjustment potentiometer. Pulse widths above the rest point result in counterclockwise rotation, with speed increasing as the pulse width increases; pulse widths below the rest point result in clockwise rotation, with speed increasing as the pulse width decreases.

It comes with mounting screws and a range of horns to suit most applications. You can use any servo code, hardware or library to control these servos, so it's great for beginners who want to make things move without the need for a motor driver board. These servos are fully compatible with our Servo:Lite board which is also included in the :MOVE mini buggy kit for the BBC microbit.

Features:
- Great value miniature servo.
- 360 Degree Operation.
- Control horns included.

Pin Assignments:

Orange (Signal)
Red (+)
Brown (-)

Contents:
- 1 x Mini 360 Degree Servo and accessories.

Dimensions:
- Length:23.2mm.
- Width: 12.5mm.
- Height: 22mm.

- Technical Information

Physical characteristics:
- Weight: 9g.
- Size: 23.2mm x 12.5mm x 22mm.
- Lead Length: 200mm
- Deadband: ±45µs

Electrical characteristics:
- Voltage Range (V): 4.8V - 6V
- Max Speed @ 6 V: 130 RPM
- Max Speed @ 4.8 V: 100 RPM
- Stall torque @ 6 V: 1.5kg/m
- Stall torque @ 4.8 V: 1.3kg/m

Electrical connections:
- Red Wire: Positive connection.
- Brown Wire: Ground connection.
- Orange Wire: Signal wire.