

## 2.5g 360 degree Micro Servo (0.45kg) SKU:SER0037



## INTRODUCTION

This small form factor micro servo with 360 degree continuous rotation is compatible with servo shields for Arduino. It's a very versatile small servo motor for micro robots or other applications where you don't have much space and the need of a full rotational motor with the benefits of a servo. This servo is capable of full 360 degree continuous rotation and can be connected to an output pin of an Arduino board directly without the need of a motor driver.

Programming the rotation in the Arduino IDE is as easy as the programming of the servo movement. With the included servo library from the Arduino website (link below) you can just make the servo rotating clockwise, counterclockwise or stop by writing the related servo angels. (0 for full speed clockwise, 90 for stop and 180 full speed counterclockwise, it is not allowed to control its position like normal servo does.)

Warning: A higher voltage will damage the servo permanently (recommended voltage is 5.0V). Do not stall the servo on purpose or the gear will break. The upper and lower part of the casing is straped together with a plastic strip. Do not damage that plastic strip otherwise the servo may fall apart.

## **SPECIFICATION**

- Model: D2S51
- Control: PWM
- Frequency: 1500µs/50Hz
- Rotation sensor: high precision potentiometer
- Rotation Angle: 360
- Voltage: 4.8V-6.0V DC
- Temperature: -20°C 60°C
- Motor Driver: MOSFET
- Pulse Width: 900 2100µs
- Midpoint Pulse: 1500µs
- Speed (non-loaded):
- o 0.09sec/60 degree@4.8V
- o 0.07sec/60 degree@6.0V
- Torque (full-loaded):
- o 0.45kg.cm@4.8V
- o 0.60kg.cm@6.0V
- Static current: <0.05A/4.8V < 0.05A/6.0V
- Working current: <0.10A/4.8V < 0.10A/6.0V
- Locked-rotor current: <0.5A/4.8V < 0.5A/6.0V
- Motor type: coreless
- Gear material: POM
- Body material: ABS
- Weight: 2.90g
- Size: 19.60\*8.00\*16.30mm(0.77\*0.31\*0.64")

## SHIPPING LIST

- servo x1
- mounting screw x2
- screw for servo horn attachment x2
- servo horn (different shape) x4

https://www.dfrobot.com/product-1106.html 5-4-17