SG90 9g servo



Specifications

• No load speed: 0.12 seconds / 60 degrees (4.8V)

• Stall Torque: 1.6 kg / cm (4.8V)

• Operating temperature: -30 ~ +60 degrees Celsius

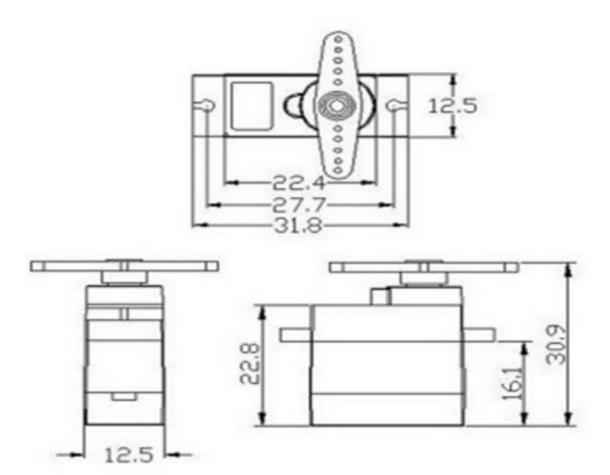
Dead Set: 7 microsecondsOperating voltage: 4.8V-6V

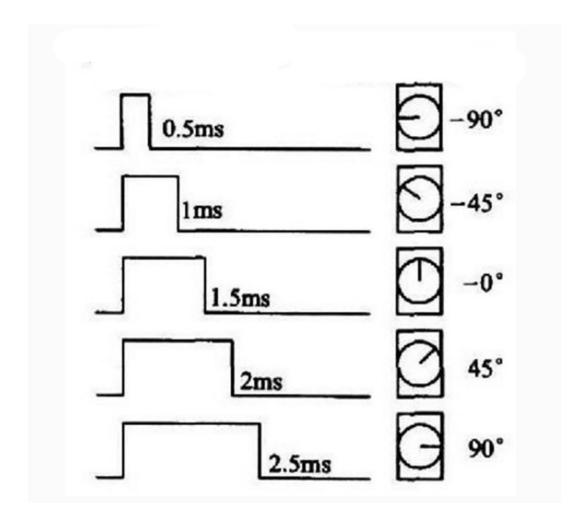
• Working rurrent: less than 500mA

• Cable length: 180mm (7 inches)

• Size: 22mmx12.5mmx29.5mm (0.9x0.5x1.2 in)

• Weight: 9 grams





Connecting

The general rule (also suitable for other model, e.g., MG996):

- red(+), black(-), white (signal);
- red(+), brown (-), yellow (signal)

The steering gear has three lines, brown ground, red power supply and orange signal, but the color of the lines may be different for different brands of steering gear. The steering angle is adjusted by adjusting the duty cycle of PWM (pulse width modulation) signal (1. duty cycle refers to the time ratio of high level in a cycle. 2. Ratio of duration of positive pulse to total period of pulse. For example, the pulse duration of positive pulse is 1 mu s, and the duty cycle of pulse sequence with signal period of 10 mu s is 0.1.

The period of standard PWM (Pulse Width Modulation) signal is fixed at 20 ms (50 Hz), and the pulse width distribution should be between 1 ms and 2 ms in theory. However, in fact, the pulse width can range from 0.5 ms to 2.5 ms, and the pulse width corresponds to the steering angle of $0 \sim 180$.

