DF15RMG Tilt Kit (20kg)

SKU:SER0030

This is a most powerful standard servo motor from DFRobot so far. A servomotor is a rotary actuator that allows precise control of angular position. This is specifically designed for the robotics application which requires high quality in a variety of the servo features.

The DF15RMG standard servo equips two pairs of the servo shells. One is a stardard shell with four M4 mounting holes. And the other one includes a shell with double bearing which is specially designed for the application of the robot arm or the joints. The shells of this kit are thickened to make it stable enough for motion system.

The torque of this servo is about 19kg.cm at 7.4v power supply. Using the Arduino servo library, you could drive this servo motor easily. To reduce the consumption of your microcontroller, this servo has a lock function for the pulse detection. So driving it to a target position just requires one PPM controlling signal.

SPECIFICATION

Mechanical Specification

- Rotation angle range: 170°
- No-load speed:60°/0.16s @7.4v
- Stall torque:19.3kg.cm（7.4v）
- Dynamic torque:15.1kg.cm（7.4v）
- Gear:steel,copper mixed gear
- Assembly method:fastening with double layer 4 screws
- Equip 2 pairs of shells,2 metal servo horns and 2 servo support
- PPM Driven
- Teeth: 25
- Size: 40x40x20 (mm)(1.57x1.57x0.79")
- Horn Diameter: 20mm/0.79"
- Weight: 65g

Electrical Specification

- Working Voltage: 5-7.4v
- Stall current:3A(@8.5V - Limit test)
- PPM Voltage:3V-5V
- PPM Resolution:2us
- PWM driver frequency:4KHZ
- Range of PPM positive pulse width:400us-2550us
- Minimum value of PPM negative pulse width:400us

Cable Definition

- Brown - GND
- Red - VCC
- Orange - Signal(PPM input wire)

SHIPPING LIST

- DF15RMG Servo x1
- A pair of standard shell x1
- A pair of shell with bearing x1
- M2 self-tapping screws x7
- M3 black round head screws x10
- short U-sharp servo bracket x1
- long U-sharp servo bracket x1