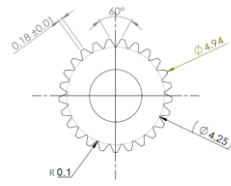
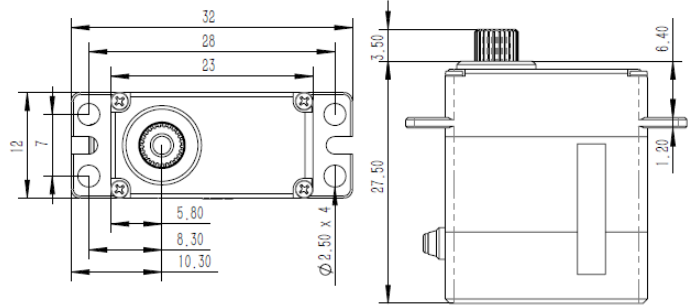


# DS215MG V8.0 Technical Specification



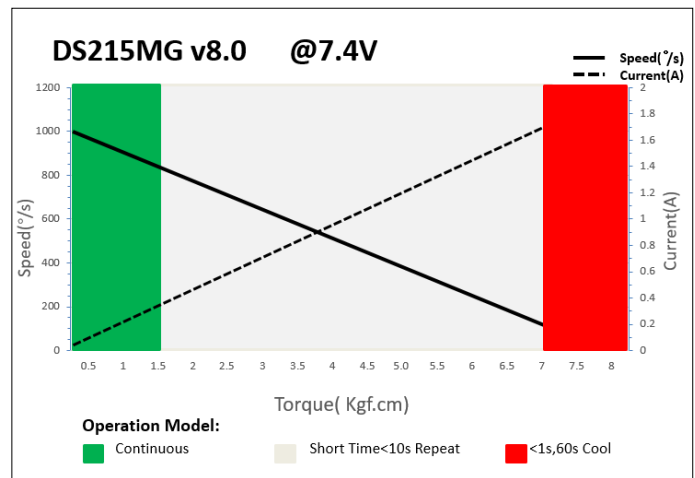
25T-5mm Output Shaft Spline



## 1. Operating Data

| DS215MG V8.0         |                        |
|----------------------|------------------------|
| Rated Voltage        | DC7.4V                 |
| Voltage Range        | DC6.0V-8.4V            |
| Torque               | 3.1Kgf.cm@6.0V         |
|                      | 3.7Kgf.cm@7.4V         |
|                      | 4.0Kgf.cm@8.4V         |
| Speed                | 0.060sec/60°@6.0V      |
|                      | 0.055sec/60°@7.4V      |
|                      | 0.050sec/60°@8.4V      |
| Working Frequency    | 1520us/333Hz           |
| Default Travel Angle | ±70° = 140° Total      |
| Temperature Range    | -10°C.....+65°C        |
| Soft Start           | Programmable           |
| Programmable         | Yes                    |
| Case Material        | Aluminum Alloy         |
| Motor Type           | Coreless DC Motor      |
| Gear Set Material    | Hardened Steel         |
| Position Sensor      | Potentiometer          |
| Ball Bearing         | 2BB                    |
| Case Dimensions      | 23mm*12mm*27.5mm±0.2mm |
| Weight               | 20g±10%                |

## 2. Performance



## 3. Command signal PWM Command Interface

|  |   |
|--|---|
| Signal Voltage                           | HIGH: min.3.3V, max.5.0V<br>Low: min.0.0V, max.1.5V |
| Pulse Lengths                            | 800us-2200us  |
| Pulse Lengths for Position -50°/ 0°/+50° | 1000us/1500us/2000us                                |

## 4. Electrical Connection

| <br>3 2 1 | Pin Assignment |        |        |                |
|-----------|----------------|--------|--------|----------------|
|           | 1              | Orange | Signal | PWM Command    |
|           | 2              | Red    | DC+    | Supply Voltage |
|           | 3              | Brown  | DC-    | Supply Ground  |