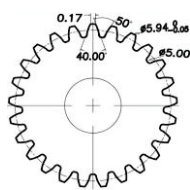
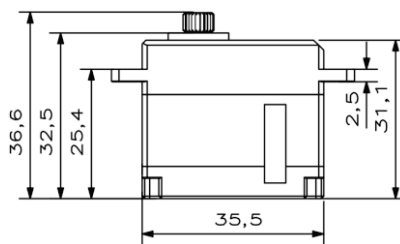
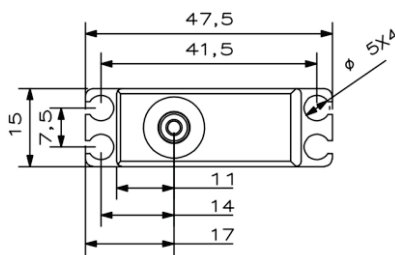


# MS589 Technical Specification



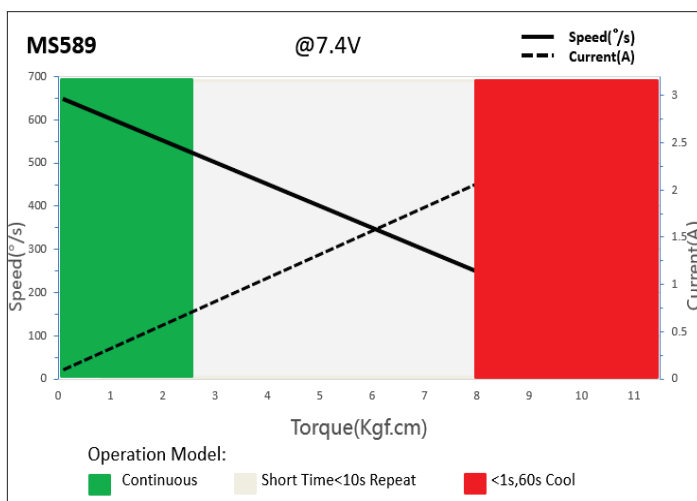
25T 6mm Output Shaft Spline



## 1. Operating Data

|                      |                      |
|----------------------|----------------------|
| Rated Voltage        | DC7.4V               |
| Voltage Range        | DC6.0V-8.4V          |
| Stalling Torque      | 6.5Kgf.cm@6.0V       |
|                      | 8.0Kgf.cm@7.4V       |
|                      | 9.2Kgf.cm@8.4V       |
| No-load Speed        | 0.10sec/60°@6.0V     |
|                      | 0.09sec/60°@7.4V     |
|                      | 0.08sec/60°@8.4V     |
| Working Frequency    | 1520us/333Hz         |
| Default Travel Angle | ±100°=200° Total     |
| Temperature Range    | -10℃ .....+65℃       |
| Soft Start           | Programmable         |
| Programmable         | Yes                  |
| Case Material        | Aluminum Alloy       |
| Motor Type           | Coreless DC Motor    |
| Gear Set Material    | Hardened Steel       |
| Position Sensor      | Contactless          |
| Case Dimensions      | 35.5*15*32.5mm±0.2mm |
| Weight               | 38g±10%              |

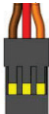
## 2. Performance



## 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              | 500us-2500us                                        |
| Pulse Lengths for Position | 1000us/1500us/2000us<br>-50°/ 0°/+50°               |

## 4. Electrical Connection

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