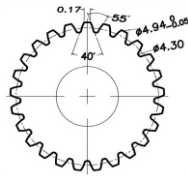
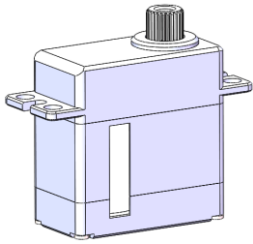
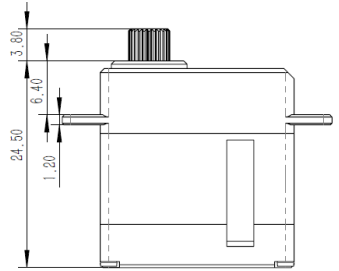
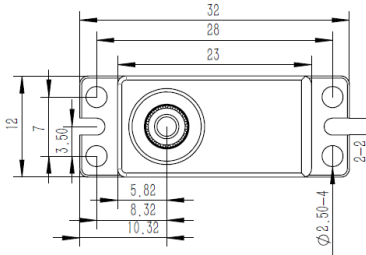


# DS213MG Technical Specification



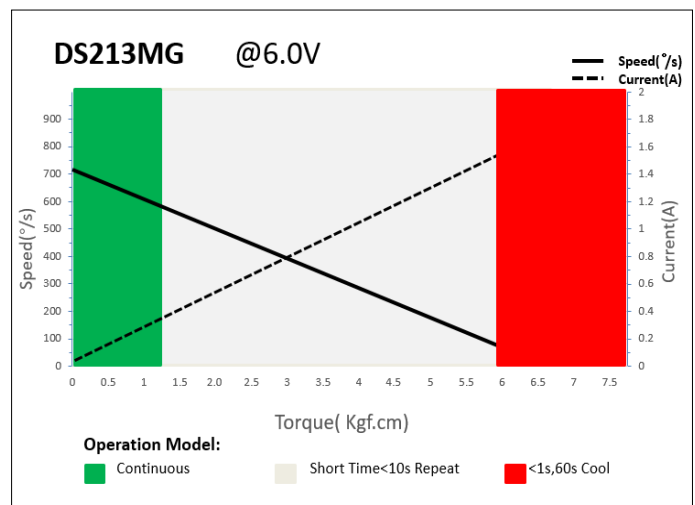
25T-5mm Output Shaft Spline



## 1. Operating Data

Rated Voltage	DC6.0V
Voltage Range	DC4.8V-7.4V
Torque	2.5Kgf.cm@4.8V
	3.0Kgf.cm@6.0V
	3.5Kgf.cm@7.4V
Speed	0.09sec/60°@4.8V
	0.08sec/60°@6.0V
	0.07sec/60°@7.4V
Working Frequency	1520us/333Hz
Default Travel Angle	±70° = 140° 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	Potentiometer
Ball Bearing	2BB
Case Dimensions	23*12*24.5mm±0.2mm
Weight	16g±10%

## 2. Performance



## 3. Command signal

### PWM Command Interface

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

## 4. Electrical Connection

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