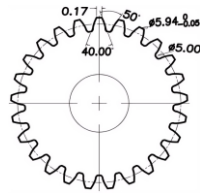
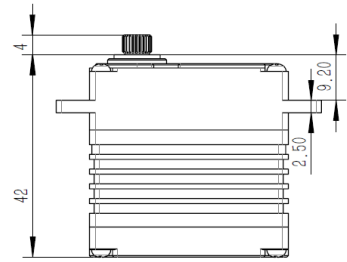
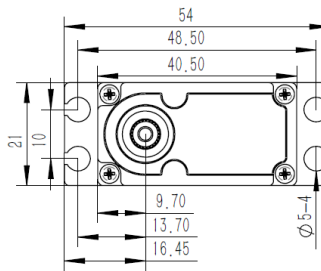


### X20-8.4-50-180F Technical Specification



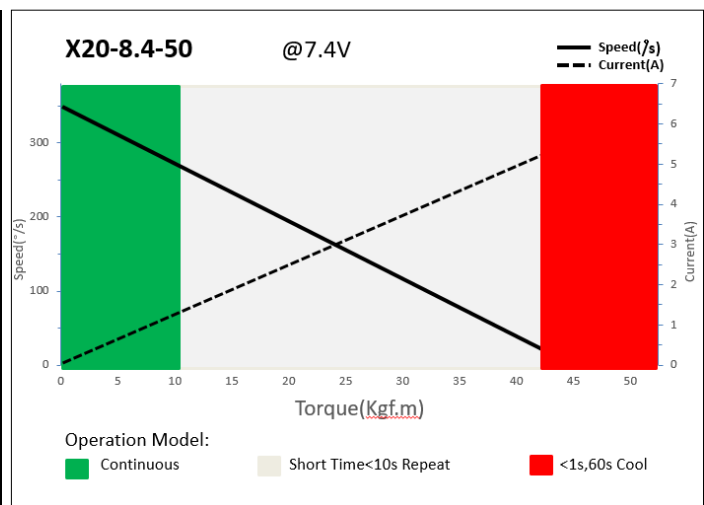
25T-6mm Output Shaft Spline



## 1. Operating Data

Rated Voltage	DC7.4V
Voltage Range	DC6.0V-8.4V
Torque	38Kgf.cm@6.0V
	42Kgf.cm@7.4V
	45Kgf.cm@8.4V
Speed	0.20sec/60°@6.0V
	0.17sec/60°@7.4V
	0.15sec/60°@8.4V
Working Frequency	1520us/333Hz
Default Travel Angle	±90° = 180° Total
Temperature Range	-10℃ .....+65℃
Case Material	Aluminum Alloy
Motor Type	Coreless DC Motor
Gear Set Material	Hardened Steel
Position Sensor	Potentiometer
Ball Bearing	2BB
Case Dimensions	40.5*21*42mm±0.2mm
Weight	78g±10%

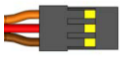
## 2. Performance



## 3. Command signal PWM Command Interface

Signal Voltage	HIGH: min.3.3V, max.5.0V Low: min.0.0V, max.1.5V
Pulse Lengths	900us-2100us
Pulse Lengths for Position	1000us/1500us/2000us -90°/ 0°/+90°

## 4. Electrical Connection

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