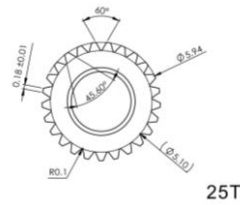
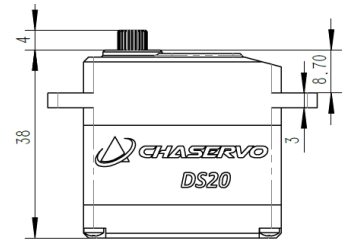
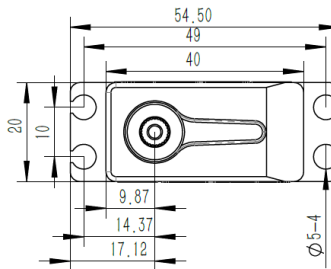


DS20 Technical Specification



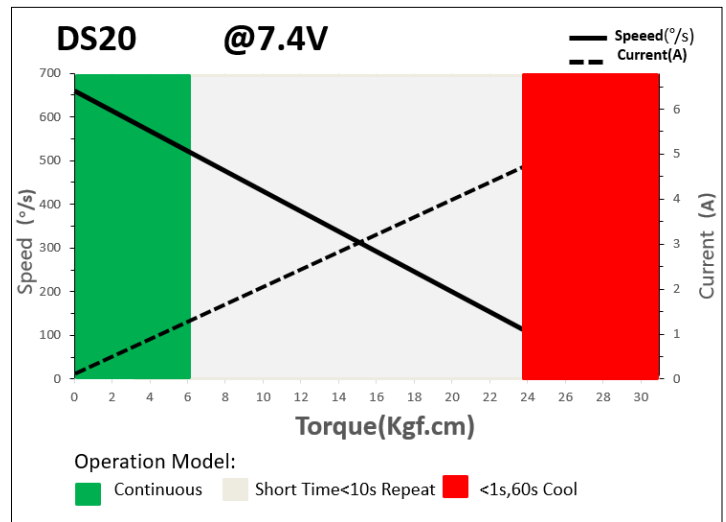
25T-6mm Output Shaft Spline



1. Operating Data

Rated Voltage	DC7.4V
Voltage Range	DC4.8V-8.4V
Torque	16Kgf.cm@4.8V
	20Kgf.cm@6.0V
	24kgf.cm@7.4V
	26Kgf.cm@8.4V
Speed	0.13sec/60°@4.8V
	0.11sec/60°@6.0V
	0.09sec/60°@7.4V
	0.08sec/60°@8.4V
Stalling Current	5.16A@4.8V
	5.82A@6.0V
	6.25A@7.4V
	6.45A@8.4V
Working Frequency	1520us/333Hz
Default Travel Angle	±50° =100° Total
Temperature Range	-10°C.....+65°C
Soft Start	programmable
Programmable	Yes
Case Material	Middle Aluminum Alloy
Motor Type	Coreless DC Motor
Gear Set Material	Metal Gear
Position Sensor	Potentiometer
Ball Bearing	2BB
Case Dimensions	40mm*20mm*38mm±0.2mm
Weight	60g±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 -50° 0°/+50°	1000us/1500us/2000us

4. Electrical Connection

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