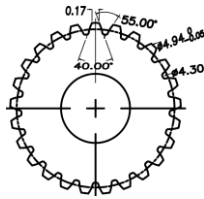
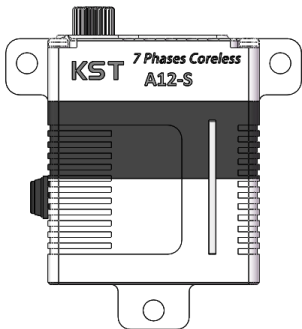
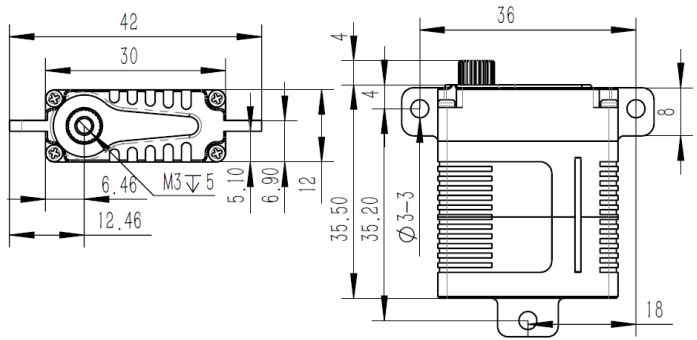


### A12-S Technical Specification



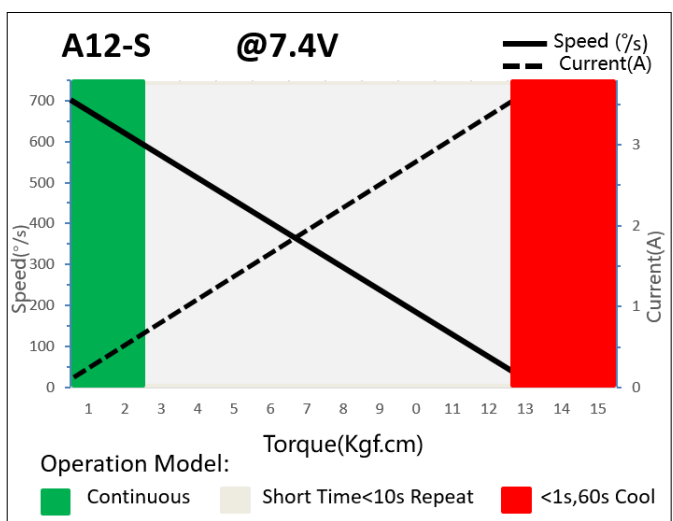
25T-6mm Output Shaft Spline



#### 1. Operating Data

Rated Voltage	DC7.4V
Voltage Range	DC6.0V-8.4V
Torque	11.0Kgf.cm@6.0V
	12.8Kgf.cm@7.4V
	13.5Kgf.cm@8.4V
Speed	0.11sec/60°@6.0V
	0.09sec/60°@7.4V
	0.08sec/60°@8.4V
Working Frequency	1520us/333Hz
Default Travel Angle	±60° = 120° Total
Temperature Range	-10℃ .....+65℃
Soft Start	Yes
Programmable	Yes
Case Material	Aluminum Alloy
Motor Type	7 Phases Coreless DC Motor
Gear Set Material	Hardened Steel
Position Sensor	Contactless
Ball Bearing	2BB
Case Dimensions	30*12*35.5mm±0.2mm
Weight	32g±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 -50° 0°/+50°

#### 4. Electrical Connection

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