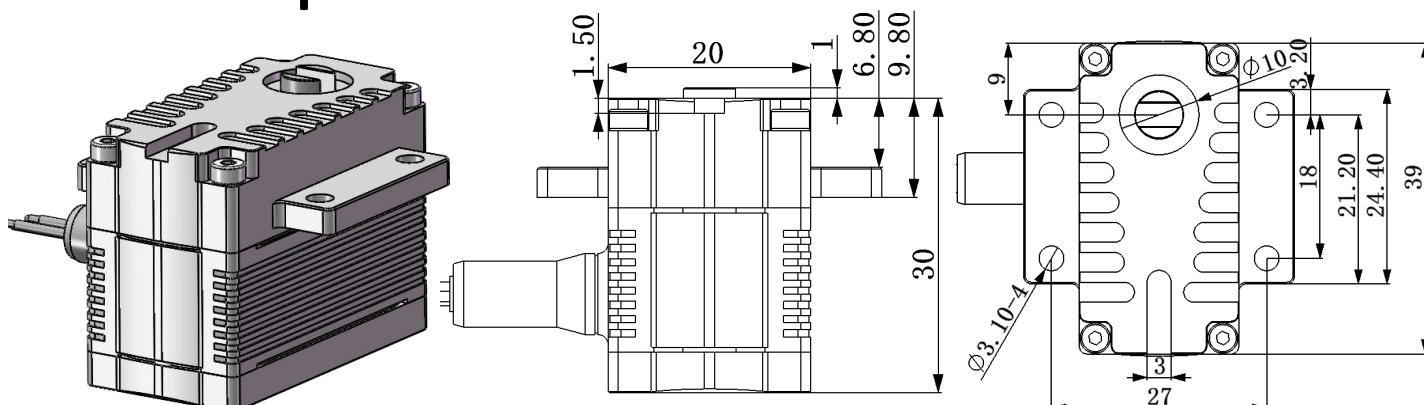


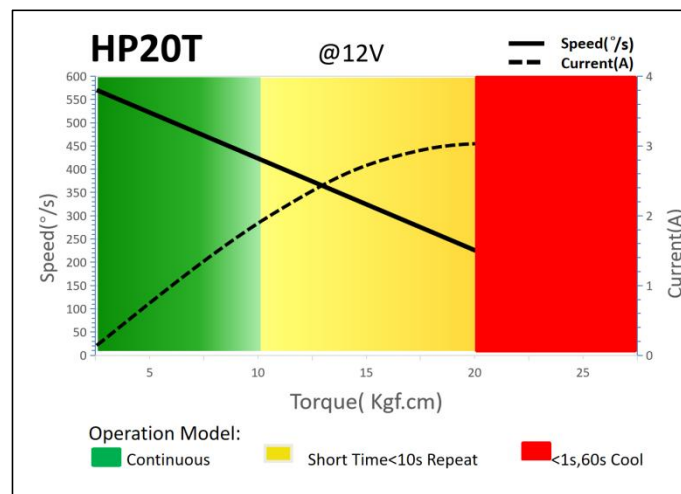
Technical Specification



1. Operating Data

Rated Voltage	DC12V
Voltage Range	DC9V-15V
No-load current	52mA
Stalling Torque	20.0Kgf.cm
No load speed	570°/sec
Rated Speed	430°/sec
Stalling Current	3.0A
Rated Torque	10.0Kgf.cm
Rated Current	2.0A
Working Frequency	1520us/333Hz
Pulse Width	1000us-2000us
Temperature Range	-30°C.....+65°C
Default Travel Angle	±50°=100° Total angle
Dead Band	2us
Gear Backlash	≤0.5°
Command Signal	PWM or CANOPEN 2.0B
Dimensions	39mm*20mm*30mm(±0.2mm)
Weight	70g±10%
Case Material	Aluminum Alloy
Motor Type	Brushless DC Motor
Gear Set Material	Hardened Steel
Position Sensor:	Contactless
Ball Bearing:	2BB

2. Performance



3.Command Signal

PWM or CANOPEN 2.0B

3.1 .1 PWM Command Interface

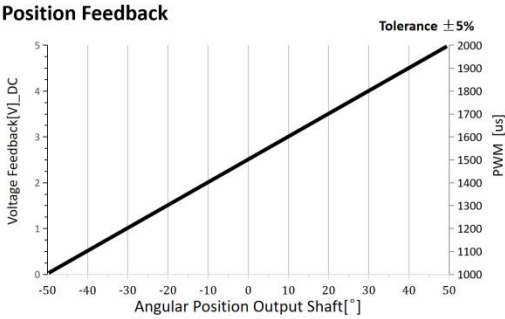
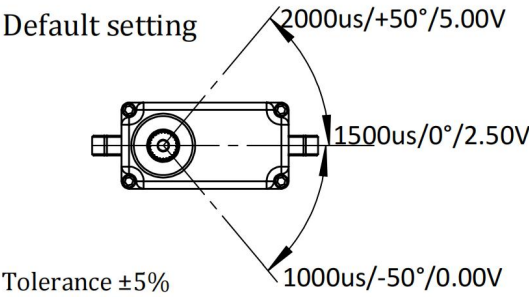
Signal Voltage	HIGH: min.3.3V, max.5.0V Low: min.0.0V, max.1.5V
Pulse Width	500us-2500us
Pulse Width for Position	1000us/1500us/2000us -50°/ 0°/+50°

3.1 .2 CAN Bus Command Interface

Baud-Rate	500Kbps
Node number	0 x25 (range 1 ~ 127, 0 is radio)
Communication	CAN Open

3.2 .1 PWM Position Feedback Signal

The Position Feedback signal (Pos FB) is an analog output signal with a voltage value which is directly related to the output shaft's angular position. Reference is **GND** .



3.2.2 CANBUS Feedback

Integrated in the Bus protocol a Feedback Value, including the Angle position, Temperature, current value. Value read by sending request command. Provide the details of the bus in the document.

4. Electrical Connection

PWM Connection	Pin Assignment			
	1	Red	DC+	Supply Voltage
	2	Black	DC - (GND)	Supply Ground,Signal Ground
	3	White	SIG	Command Signal
	4	Blue	FB +	Feedback Signal
CANBUS Connection	Pin Assignment			
	1	Red	DC+	Supply Voltage
	2	Black	DC -	Supply Ground
	3	White	CAN_H	
	4	Blue	CAN_L	

5. Item Number System

