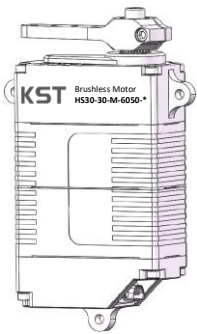
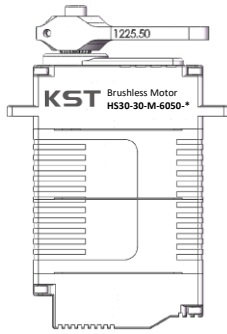


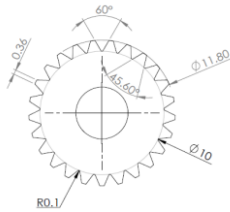
HS30-30-M-6050-* (*: 1-PWM, 2-RS485, 3-CANBUS, 4-RS422)



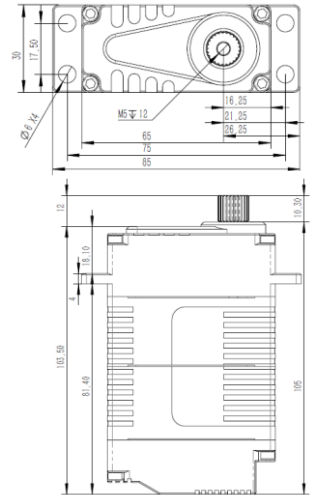
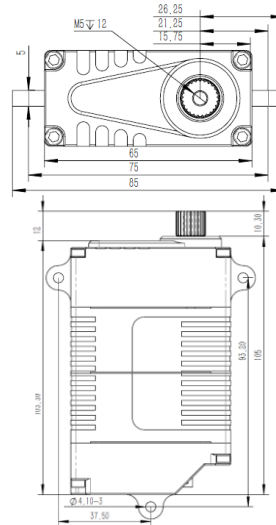
Version A



Version B



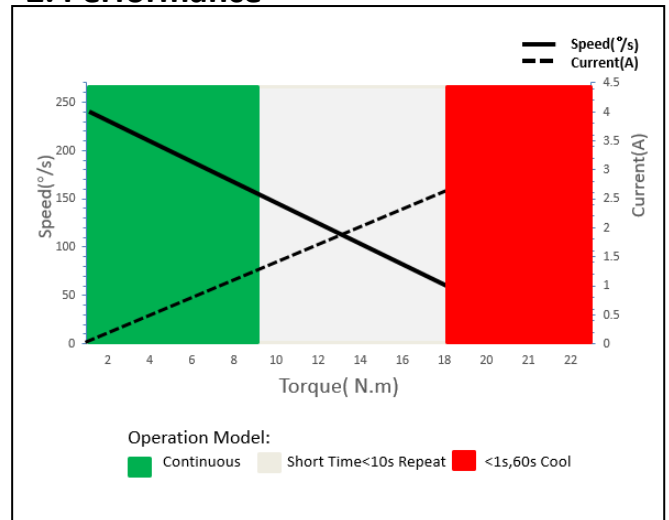
25T 12mm
Output Shaft Spline



1. Servo Data

Rated Voltage	DC30V	
Voltage Range	DC24V-32V	
Stalling Torque	18.0N.m@30V	
Rated Torque	9.0N.m@30V	
Stalling Current	3.00A	
Rated Current	1.40A	
No-load Speed	240°/s @25°C/30V	
Rated Speed	160°/s @25°C/30V	
Default Travel Angle	±100° = 200° total travel	
Operating Temperature Range	-30°C.....+65°C	
Case Material	Aluminum Alloy 7075	
Motor Type	Brushless DC Motor	
Gear Set Material	Hardened Steel	
Position Sensor	Contactless	
Shielded Connecting Cable	J30J-9TJL/900mm(1500mm:Options)	
Version A	Case Dimensions	65mm*30mm*105mm(±0.2mm)
	Weight	450g(±10%)
Version B	Case Dimensions	65mm*30mm*105mm(±0.2mm)
	Weight	450g(±10%)

2. Performance



3. Command Signal

3.1 PWM Command Interface

Signal Voltage	HIGH:min.3.3V,max.5.0V Low:min.0.0V,max.1.5V
Pulse Lengths	500us-2500us
Pulse Lengths for Position	500us/1500us/2500us -100° 0°/+100°

3.2 RS485 / RS422 Command Interface

Baud-Rate	115200 ±1.5% bits/s
Protocol (Documentation available)	10 Byte (incl. 1 byte Check Sum)

3.2.1 RS485 / RS422 Protocol Specifications

Number of Data Bits	8
Number of Stop Bits	1
Parity	None

Command / Response Frame

Byte #	Description	Byte #	Description
1	Frame Head(0xFE)	6	Data
2	Version(0xCA)	7	Data
3	Address	8	Data
4	Command code	9	Check Sum
5	Data	10	(0A)Frame End

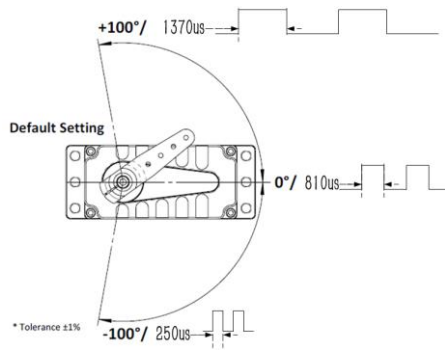
3.3 CAN Bus Command Interface

Baud-Rate	500Kbps	Communication	3.1: CAN Open standard frame 3.2: CAN Extended frame
Node number	0 x25 (range 1 ~ 127, 0 is radio)		

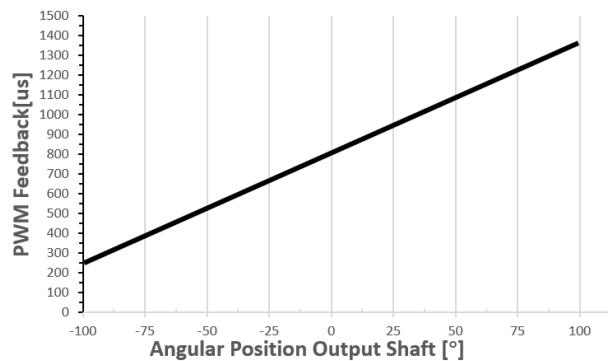
3.4. Feedback Signal

3.4.1 Position Feedback Signal (PWM Versions)

The Position Feedback signal is an output signal with a square wave which is directly related to the output shaft's angular position. Reference is Supply Ground.



Position Feedback



3.4.2 Feedback Value (Bus Version)

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.

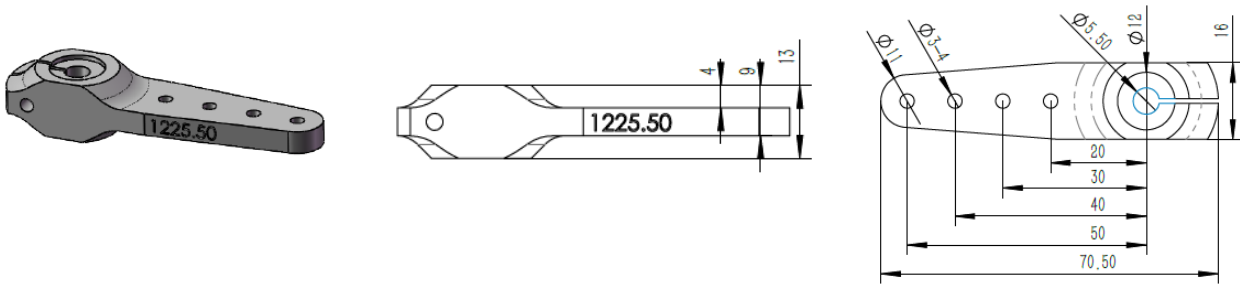
4. Industrial Standard J30J-9ZKP electrical Connector

Pin No.	Assignment PWM		Assignment RS485		Assignment CAN		Assignment RS422	
	1	2	1	2	1	2	1	2
1	DC +	Supply Voltage	1	DC +	Supply Voltage	1	DC +	Supply Voltage
2	NC	Do not connect	2	NC	Do not connect	2	NC	Do not connect
3	DC-	Supply Ground	3	DC-	Supply Ground	3	DC-	Supply Ground
4	PWM	Command Signal	4	RS485A	4	CAN_H	4	TX+
5	NC	Do not connect	5	RS485B	5	CAN_L	5	TX-
6	DC +	Supply Voltage	6	DC +	Supply Voltage	6	DC +	Supply Voltage
7	NC	Do not connect	7	NC	Do not connect	7	NC	Do not connect
8	DC-	Supply Ground	8	DC-	Supply Ground	8	DC-	Supply Ground
9	PWM	Command Signal	9	PWM	Command Signal	9	PWM	Command Signal

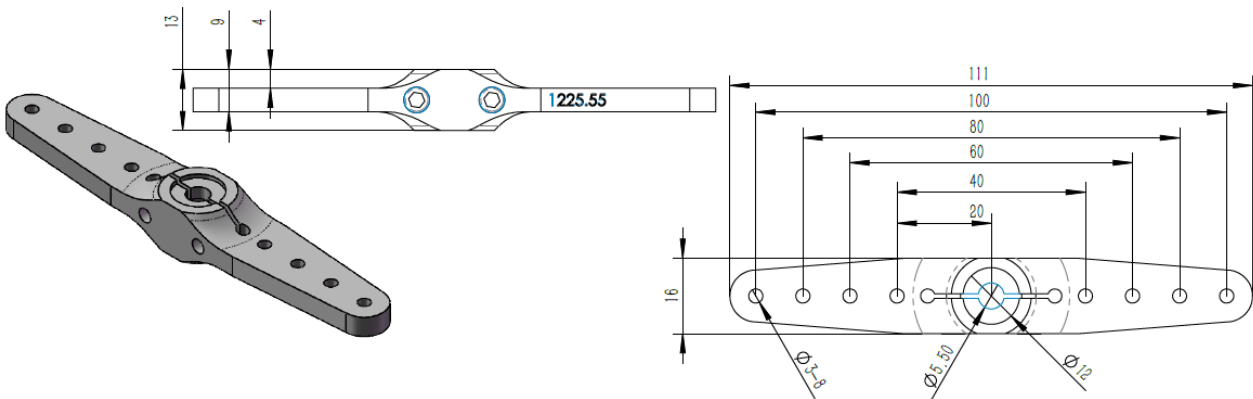
5. Accessories List

Model	Output Shaft Spline	Item	Item No.
HS30-30-M-6050-*	25T 12mm	Aluminum Servo Arm (Single side)	1225.50
		Aluminum Servo Arm (Double side)	1225.55
		Aluminum Servo Disc	1225.16.5

Item No.: 1225.50



Item No.: 1225.55



Item No.: 1225.16.5

