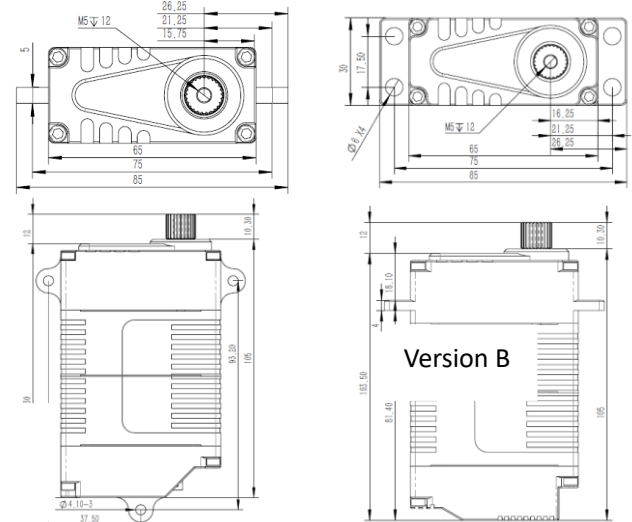
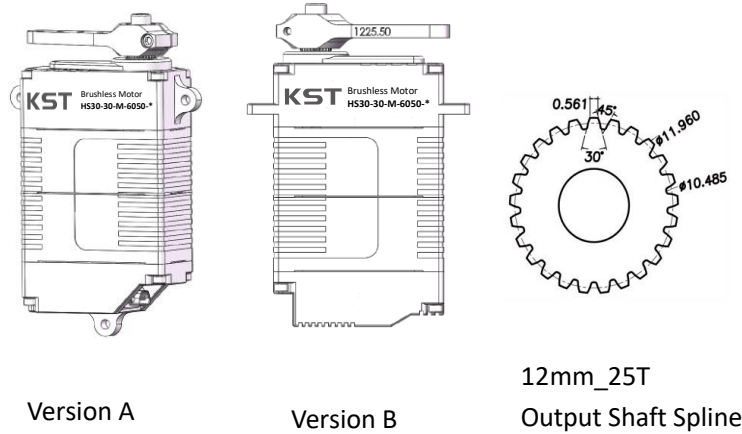


HS30-30-M-6050-x Technical Specification



1. Servo Data

Rated Voltage		DC30V
Voltage Range		DC24V-32V
Stalling Torque		180Kgf.cm@30V
Rated Torque		90Kgf.cm@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/1500mm
Ball Bearing		6BB
Version A	Case Dimensions	65*30*105mm(±0.2mm)
	Weight	450g (±10%)
Version B	Case Dimensions	65*30*105mm(±0.2mm)
	Weight	450g (±10%)

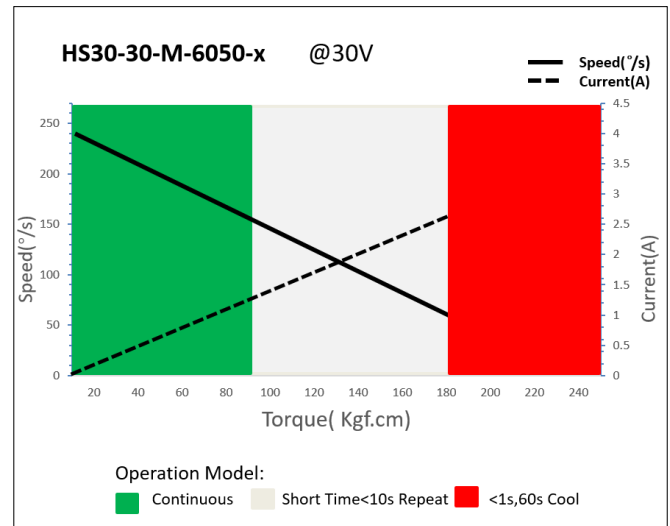
3.2 RS485 / RS422 Command Interface

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

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°

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

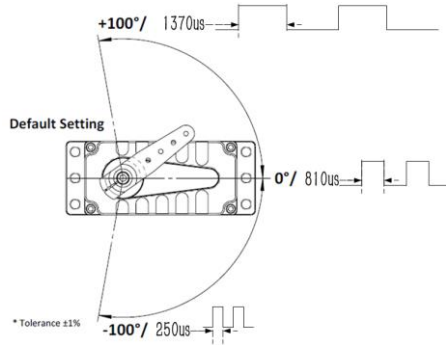
3.3 CAN Bus Command Interface

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)		

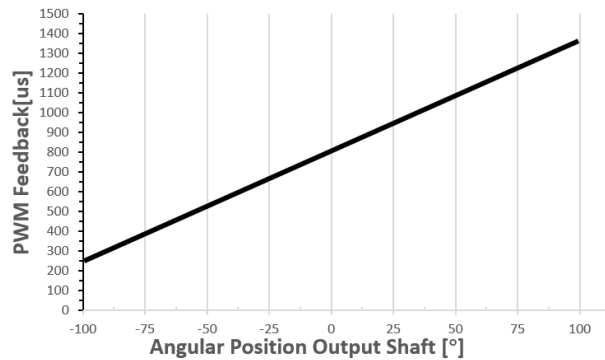
3.4. Feedback Signal

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.



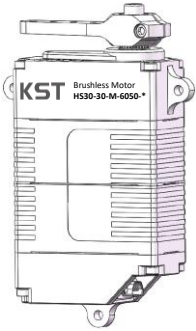
Position Feedback



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.

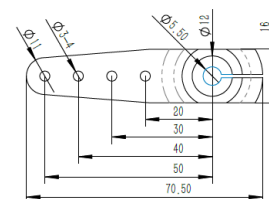
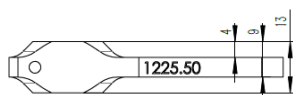
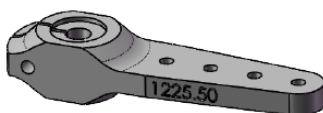
4. Industrial Standard J30J-9ZKP electrical Connector

	Assignment PWM		Assignment RS485		Assignment CAN		Assignment RS422	
	1	DC + Supply Voltage	1	DC + Supply Voltage	1	DC + Supply Voltage	1	DC + Supply Voltage
	2	DC - Supply Ground	2	DC - Supply Ground	2	Isolated GND	2	NC Do not connect
	3	PWM Command Signal	3	RS485A	3	DC- Supply Ground	3	DC- Supply Ground
	4	Feedback signal	4	RS485B	4	CAN_H	4	RX+
	5	Signal GND	5		5	CAN_L	5	RX-
	6		6		6		6	TX+
	7		7		7		7	TX-
	8		8		8		8	
	9		9		9		9	

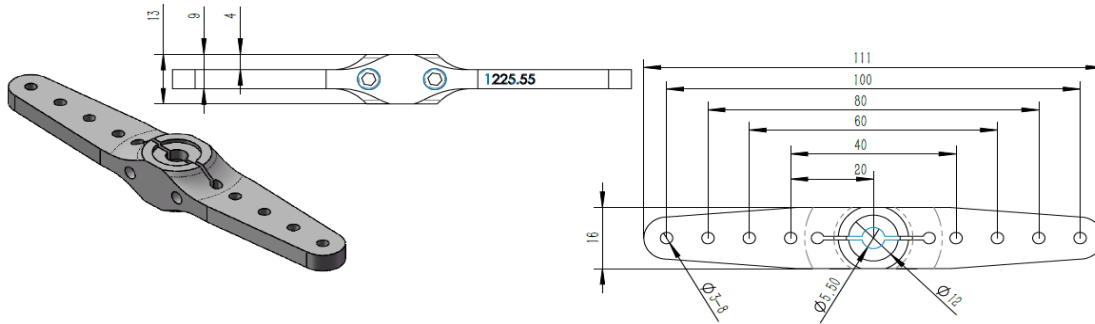
5. Accessories List

Model	Output Shaft Spline	Item	Item No.
HS30-30-M-6050-X	12mm_25T	Aluminum Servo Arm (Single side)	1225.50
		Aluminum Servo Arm (Double side)	1225.55
		Aluminum Servo Disc	1225.16.5

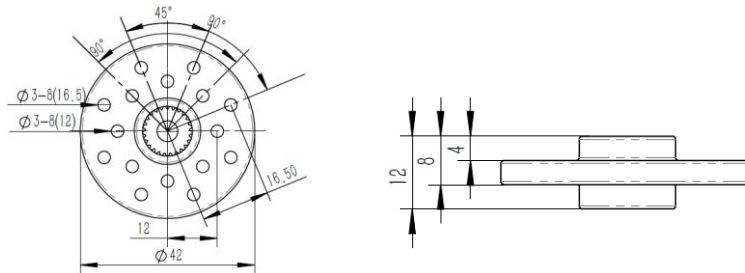
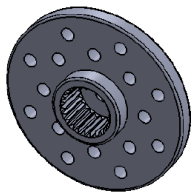
Item No.: 1225.50



Item No.: 1225.55



Item No.: 1225.16.5



6. Item Number System

