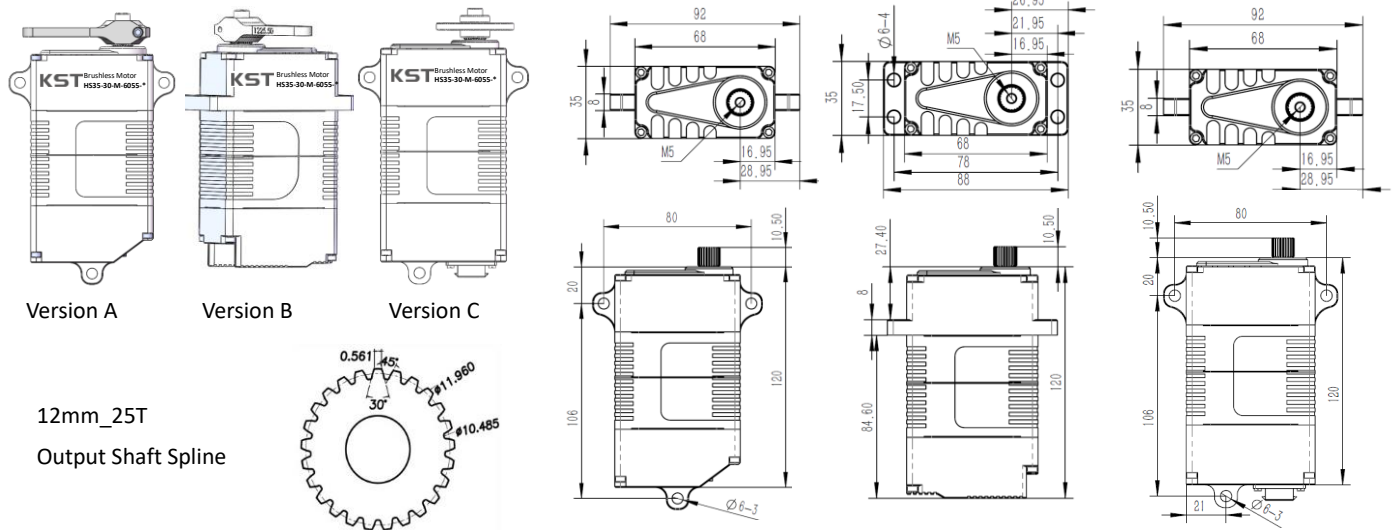


HS35-30-M-6055-x Technical Specification



1. Servo Data

Rated Voltage		DC30V
Voltage Range		DC24V-32V
Stalling Torque		300Kgf.cm@30V
Rated Torque		120Kgf.cm@30V
Stalling Current		5.00A
Rated Current		1.95A
No-load Speed		220°/s @25°C/30V
Rated Speed		150°/s @25°C/30V
Default Travel Angle		±100° = 200° total travel
Operating Temperature Range		-30℃+65℃
Case Material		Aluminum Alloy 7075
Motor Type		Brushless DC Motor
Gear Set Material		Hardened Steel
Position Sensor		Contactless
Shielded Connecting Cable		J30J-15TJL/1500mm
Ball Bearing		6BB
Version A&C	Case Dimensions	68*35*120mm(± 0.2mm)
	Weight	680g(± 10%)
Version B	Case Dimensions	68*35*120mm(± 0.2mm)
	Weight	680g(± 10%)

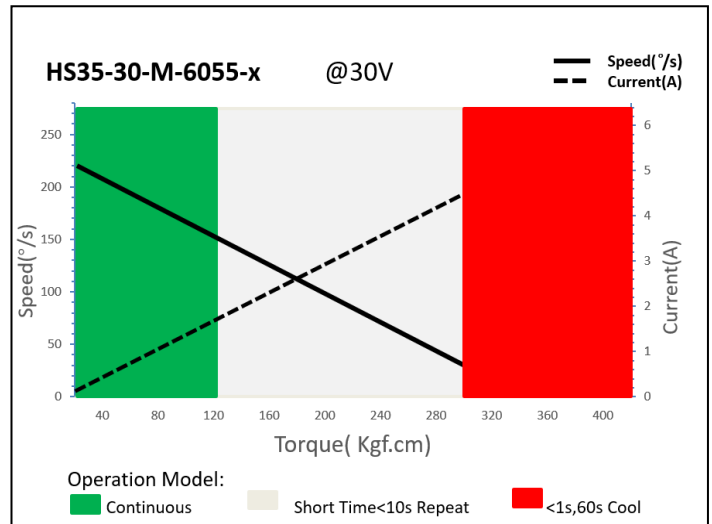
3.2 RS485 / RS422 Command Interface

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

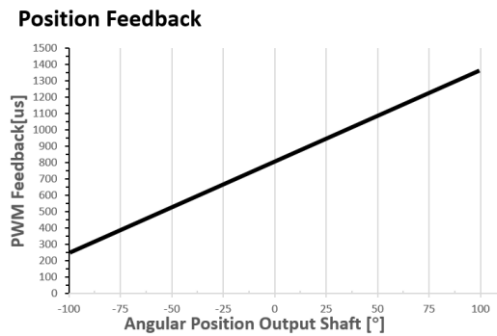
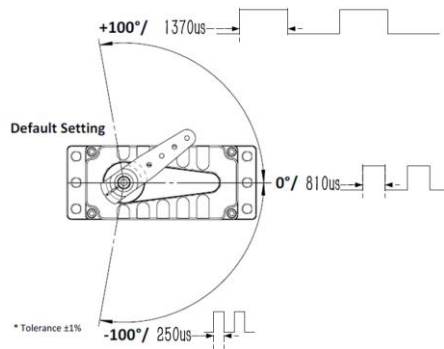
3.3 CAN Bus Command Interface

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)

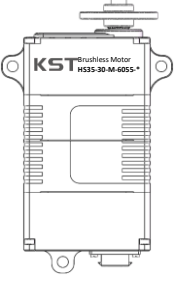
The Position Feedback signal is an output signal with a square wave which is directly related to the output shaft's angular position. Reference is Supply Ground.



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.

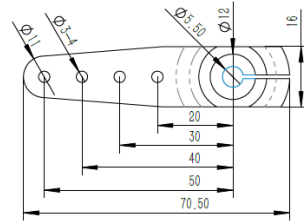
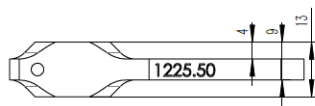
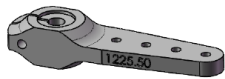
4. Industrial Standard J30J-15ZKP electrical Connector Pin Assignment

	Assignment PWM			Assignment RS485			Assignment CAN			Assignment RS422	
	1			1			1			1	
	2	DC +		2	DC +		2	DC +		2	DC +
	3	Supply Voltage		3	Supply Voltage		3	Supply Voltage		3	Supply Voltage
	4			4			4			4	
	5			5			5			5	
	6	DC- Supply Ground		6	DC- Supply Ground		6	DC- Supply Ground		6	DC- Supply Ground
	7			7			7			7	
	8			8			8			8	
	9	Do not connect		9	NC		9	NC		9	NC
	10	PWM Command Signal		10	Do not connect		10	Isolated GND		10	Do not connect
	11			11			11			11	
	12	FeedBack Signal		12	RS485A		12	CAN High		12	RX+
	13			13			13			13	RX-
	14	Signal GND		14	RS485B		14	CAN Low		14	TX+
	15			15			15			15	TX-

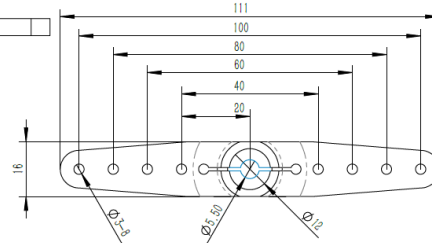
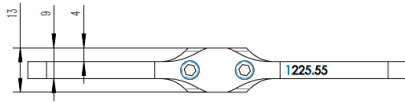
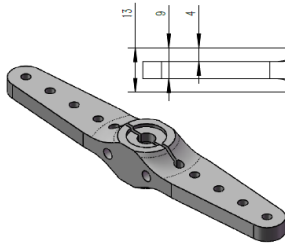
5. Accessories List

Model	Output Shaft Spline	Item	Item No.
HS35-30-M-6055-x	25T 12mm	Aluminum Servo Arm (Single side)	1225.50
		Aluminum Servo Arm (Double side)	1225.55
		Aluminum Servo Disc	1225.16.5

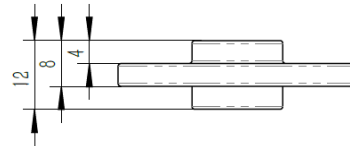
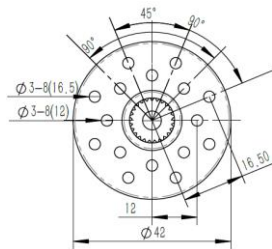
Item No.: 1225.50



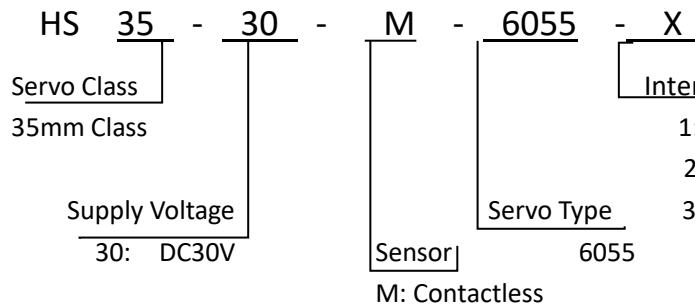
Item No.: 1225.55



Item No.: 1225.16.5



6. Item Number System



- 3.1: CAN Open Standard Frame
- 3.2: CAN Open Extended Frame
- 3.3: Drone CAN (UAVCAN)
- 3.5: Isolated CAN Bus
- 3.51: CAN Open Standard Frame
- 3.52: CAN Open Extended Frame
- 4: RS422 Bus