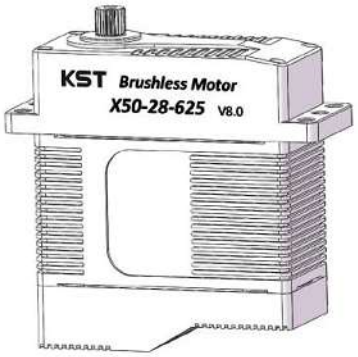
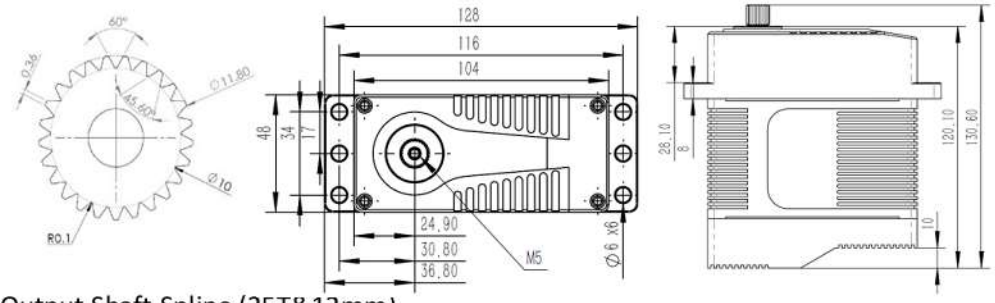
X50-28-625-* V8.0 HLS Technical Specification



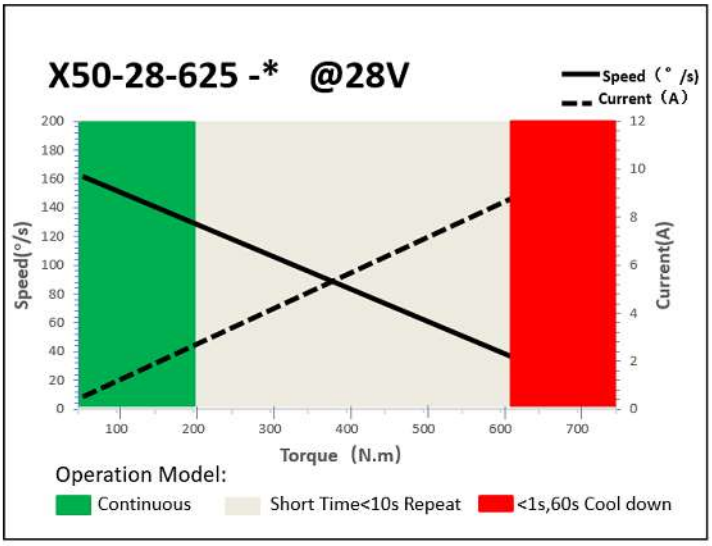


Output Shaft Spline (25T&12mm)

1. Servo Data

	X50-28-625-*
Rated Voltage	DC28V
Voltage Range	DC24V-32V
Stalling Torque	62.5N.m@28V
Rated Torque	20N.m@28V
No-load Speed	0.36sec/60°@28V
Rated Speed	0.50sec/60°@28V
Stalling Current	10.0A
Rated Current	2.20A
Working Frequency	1520us/333Hz
Default Travel	±50°=100° Total
Temperature Range	-10℃.....+65℃
Case Material	Aluminum Alloy
Motor Type	Brushless DC Motor
Gear Set Material	Hardened Steel
Position Sensor	Potentiometer
Case Dimensions	104mm*48mm*120mm±0.2mm
Weight	1200g±10%
Ball Bearing	7 BB

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	900us-2100us
Pulse Lengths for Position	1000us/1500us/2000us -50°/ 0°/+50°

3.2. RS485 Command Interface

Baud-Rate	115200 ±1.5% bits/s
Protocol	10 Byte (incl. 1 byte Check Sum)
(Documentation	8
Number of Data	1
Number of Stop Bits	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

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Phone: +496078968327, E-mail: Info@kst-servos.com, Website: www.kst-servos.com

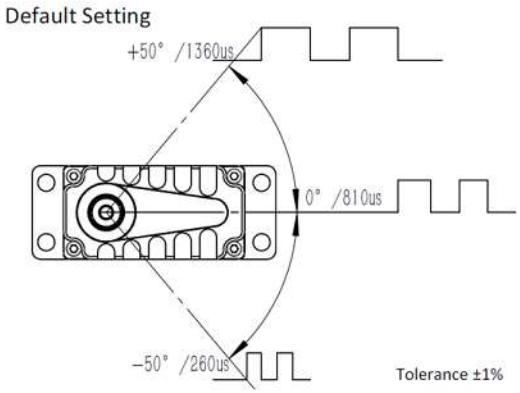
3.3 CAN Bus Command Interface

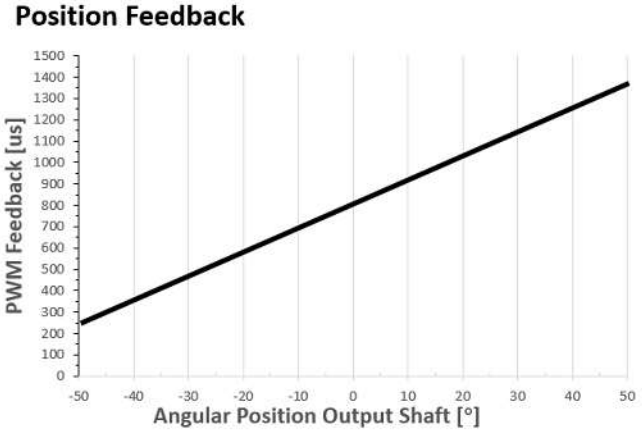
Baud-Rate	500Kbps	Communication	3.1: CAN Open standard frame 3.2: CANOpen Extended frame
Node number	0 x25 (range 1 ~ 127, 0 is radio)		

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.



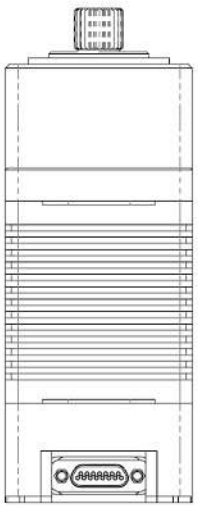


3.4.2 Feedback Value (Bus Version)

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. Electrical Connection Options

Industrial Standard J30J-15ZKP electrical Connector



	Assignment PWM		Assignment RS485		Assignment CAN	
1	DC + Supply Voltage		1	DC + Supply Voltage	1	DC + Supply Voltage
2			2		2	
3			3		3	
4			4		4	
5	DC- Supply Ground		5	DC- Supply Ground	5	DC- Supply Ground
6			6		6	
7			7		7	
8			8		8	
9	Do not connect		9	Do not connect	9	Do not connect
10	PWM Command Signal		10	Do not connect	10	Do not connect
11			11		11	
12	Feedback		12	RS485A	12	CAN_H
13			13		13	
14	Signal Ground		14	RS485B	14	CAN_L
15			15		15	

***: 1-PWM, 2- RS485, 3.1- CANBUS Standard Frame 3.2- CANBUS Extended Frame**

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