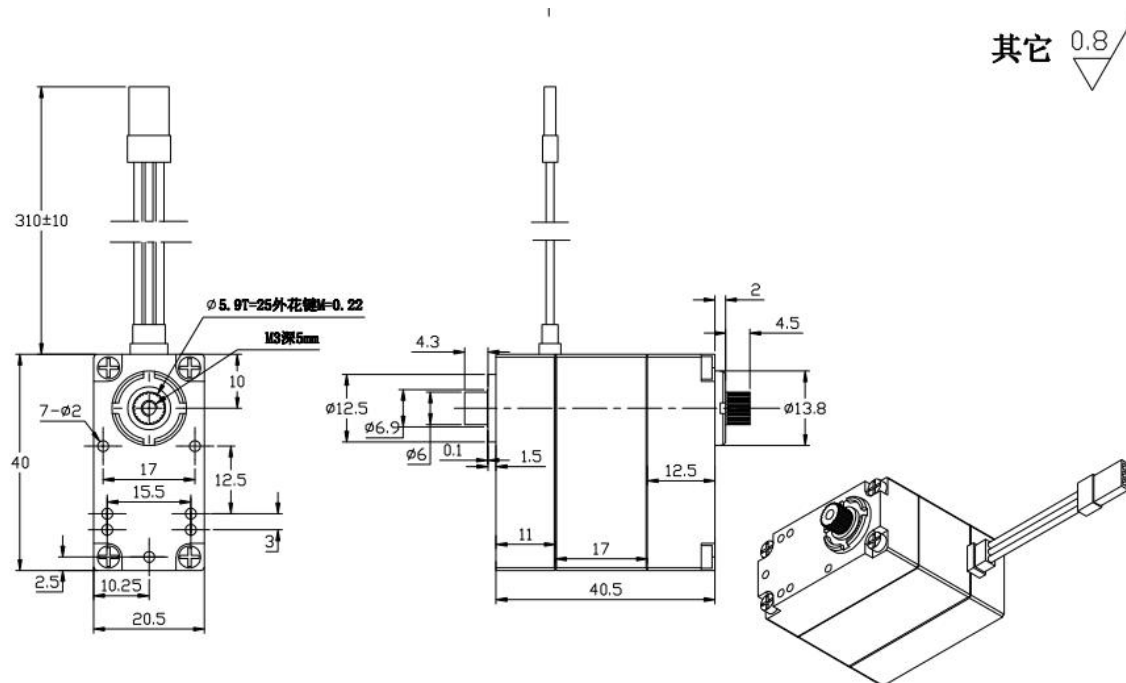


SHENZHEN SKY STAR TECHNOLOGY CO.,LTD						
Data Sheet of TD-7120MG Digital Servo Motor						
Product Specification						
Products Name : TD-7120MG 20KG Digital Servo Motor						
1.Apply Environmental Conditon						
No	Item			Specifcation		
1.1	Storage Temperature Range			-30℃～80℃		
1.2	Operating Temperature Range			-25℃～70℃		
2. Standard Test Environment						
No	Item			Specifcation		
2.1	Temperature Range			-25℃～70℃		
2.2	Humidity Range			65%±10%		
3. Mechanical Specification						
No	Item			Specifcation		
3.1	Size			40.0*20.5*40.5mm		
3.2	Weight			60g±5%		
3.2	Gear type			6 Metal		
3.4	Limit angle			360°		
3.5	Bearing			2BB		
3.6	Horn gear spline			25T 直径:5.9mm		
3.7	Horn type			Plastic, POM		
3.8	Case			Aluminum alloy		
3.9	Connector wire			300mm±5mm		
3.10	Motor			Carbon brush motor		
3.11	Waterproof Grade			IP66		
4. Electrical Specification						
No	Item			Specifcation		
4.1	Operating voltage			4.8V	6.0V	7.2V 8.4V
4.2	Idle current			< 40mA		
4.3	No load speed			0.18sec/60°	0.17sec/60°	0.15sec/60° 0.14sec/60°
4.4	Runnig current			210mA	260mA	350mA 450mA
4.5	Peak stall torque			20.5kg.cm	21.5kg.cm	22.5kg.cm 23.8kg.cm
4.6	Stall current			2300mA±10%	2600mA±10%	3000mA±10% 3300mA±10%
5. Control Specification						

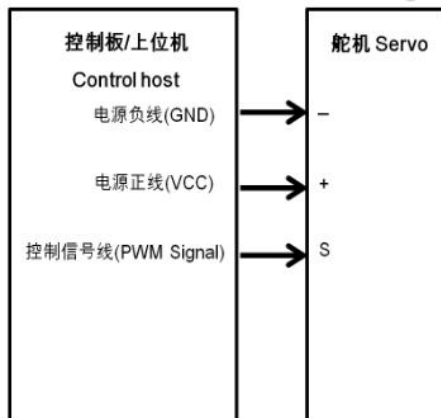
No	Item	Specifcation
5.1	Command signal	Pulse width modification
5.2	Amplifier type	Digital controller
5.3	Pulse width range	500~2500usec
5.4	Neutral position	1500usec
5.5	Running degree	$180^{\circ} \pm 3^{\circ}$ (when 500~2500usec)
5.6	Dead band width	3 usec
5.7	Rotating direction	Counterclockwise (when 1000~2000usec)
Check by : 焦娇		Approve by : 孟凡
		Date : 2023-3-23

2. 2D Dimension Drawing



Note: The dimension diagram of this product has an error of $\pm 0.2\text{mm}$ compared to the actual product dimensions.

3.Product Control



Note: Operating Voltage : 4.8V-8.4V , Signal Voltage : 3.0-5.0V . Signal Period : 20ms, Pulse Width : 500us-2500us .