

SHENZHEN SKY STAR TECHNOLOGY CO.,LTD

Data Sheet of TD-9412MG Digital Servo Motor

Product Specification

Products Name: TD-9412MG 12KG 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	40.8*20.2*28.7mm
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 Diame: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	IP65

4. Electrical Specification

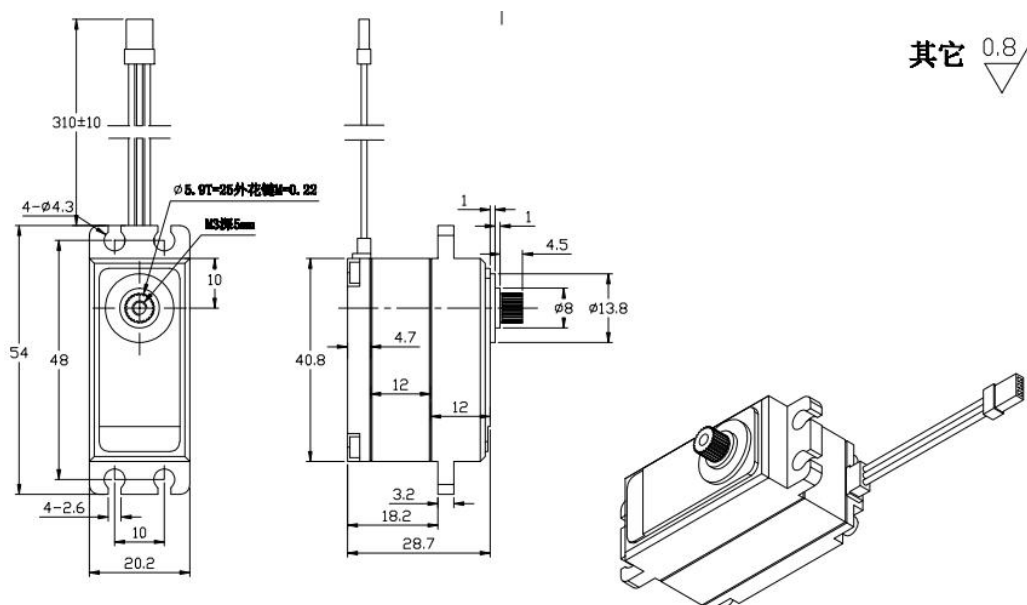
No	Item	Specifcation
4.1	Operat voltage	4.8V 7.2V
4.2	Idle current	<40mA
4.3	No load speed	0.12sec/60° 0.09sec/60°
4.4	Runnig current	210mA 260mA
4.5	Peak stall torque	11.5kg.cm 14.5kg.cm
4.6	Stall current	2000mA±10% 2700mA±10%

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

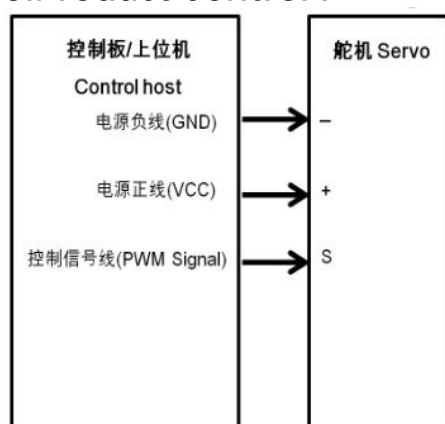
5.5	Running degree	$180^{\circ} \pm 3^{\circ}$ (when 500~2500usec)
5.6	Dead band width	3 usec
5.7	Rotating direction	Counterclockwise (when 1000~2000usec)
Check by : 焦娇		Approve by: 孟凡
		Date : 2023-3-23

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 .