

# 国华舵机 GH-SN90D 规格说明书

## Specification of Guo Hua Servo GH-SN90D

### 1. 使用环境条件

Apply Environmental Condition:

No.	项目 Item	规格 Specification
1-1	保存温度 Storage Temperature Range	-20°C ~ 60°C
1-2	操作温度 Operating Temperature Range	-10°C ~ 60°C
1-3	操作电压 Operating Voltage Range	4.8V~6.0V

### 2. 测试环境

Standard Test Environment:

2-1	测试环境 Standard Test Environment	每一种特性检查必须在正常的温度和湿度下进行测试, 温度 $25 \pm 5^{\circ}\text{C}$ , 相对湿度 $65 \pm 10\%$ , 在按照本规范的标准测试条件下判断特征。 Every characteristic of the inspect must be normal temperature and humidity carry out the test, temperature $25 \pm 5^{\circ}\text{C}$ and relative humidity $65 \pm 10\%$ of judgment made in accordance with this specification standard testing conditions.
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### 3. 外观检查

Appearance Inspection:

No.	项目 Item	规格 Specification
3-1	外观尺寸 Outline Drawing	尺寸见尾页 Dimension see the last page
3-2	外观 Appearance	无损坏, 不允许影响功能。 No damage which affects functions allowed.

### 4. 电气特性

Electrical Specification(Function of the Performance):

No.	项目 Item	4.8V	6.0V
4-1	空载转速 Operating speed(at no load)	0.11 Sec/60°	0.09 Sec/60°
4-2	空载电流 Running current(at no load)	80 ± 10m A	90 ± 10 m A
4-3	堵转扭力	1.8 ± 0.5 kg-cm	2.1 ± 0.5kg-cm

	Stall torque(at locked)		
4-4	堵转电流 Stall current(at locked)	530±30m A	750±30m A
4-5	待机电流 Idle current(at stopped)	3±m A	3±m A
4-6	空载寿命 Running life(at no load)	100000 次≥	100000 次≥

注：项目 4-2 定义平均值时，舵机无负载运行。

Note: Item 4-2 definition is average value when the servo running with no load.

## 5. 机械特性

Mechanical Specification:

No.	项目 Item	规格 Specification
5-1	外观尺寸 Overall Dimensions	见图纸 See the drawing
5-2	机构极限角度 Limit angle	240° ±10°
5-3	重量 Weight	8±0.5 grams(without servo horn and screw)不含摇臂和螺丝
5-4	连接线规格 Connector wire gauge	#28 AWG
5-5	连接线长度 Connector wire length	250±5 mm
5-6	摇臂规格 Horn gear spline	21T
5-7	摇臂种类 Horn type	1 组/十字，一字，半一字，圆形 1/Cross, Two blade, One blade, Circle. 2 组/十字，一字，半一字 2/ Cross, Two blade, One blade.

## 6. 控制特性

Control Specification:

No.	Item	Specification
6-1	控制系统 Control system	脉宽调整 Pulse width modification
6-2	放大器种类 Amplifier type	数字控制器 Digital controller
6-3	操作角度 Operating travel	180±5°
6-4	中立位置 Neutral position	1500 μ sec
6-5	脉冲讯号虚位 Dead band width	3 μ sec

6-6	旋转方向 Rotating direction	逆时针转(500~2500 微秒) Counterclockwise (When 1000~2000 $\mu$ sec)
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