

REV

A1



# 产品规格书

## Specification Confirmation

客户(CUSTOMER): \_\_\_\_\_

型号(MODEL NO.): DS-H015A-HN-01

半铝框矮身舵机

在您下单采购本产品之前请您阅读本规格书并在下列承认栏内签字回传!

Please detail check and sign it back before order this product!

### 客户承认栏 Custom Confirmation

| 承认 Prepared | 审核 Checked | 批准 Approval |
|-------------|------------|-------------|
|             |            |             |

### 本公司承认栏 DS Confirmation

| 承认 Prepared | 审核 Checked | 批准 Approval |
|-------------|------------|-------------|
| 李哲          | 邓志群        |             |

### 修改记录 Revise record

| REV | 记录 Record | 日期 Date    |
|-----|-----------|------------|
| A/0 | 初版发行      | 2021.01.24 |
|     |           |            |
|     |           |            |
|     |           |            |
|     |           |            |

|             | Item  | Specification                            | Remarks                      |               |
|-------------|---|--|------------------------------|---------------|
| 1           | Operating Voltage 工作电压                        | 6.0~7.4V DC                              |                              |               |
| 2           | Standby Current 静态电流                          | ≤15 mA                                   |                              |               |
| 3           | Consumption Current* (No Load) 空载工作电流         | 6.0V                                     | ≤90 mA                       |               |
|             |   | 7.4V                                     | ≤100 mA                      |               |
| 4           | Stall Current 堵转电流                            | 6.0V                                     | ≤3.6A                        | 持续堵转 10 秒断电保护 |
|             |   | 7.4V                                     | ≤4.2 A                       |               |
| 5           | Weighting Torque(Max.) 吊重最大扭矩                 | 6.0V                                     | ≥6kg/cm(砝码吊重)                |               |
|             |   | 7.4V                                     | ≥7 kg/cm (砝码吊重)              |               |
| 6           | Max. Torque* 最大扭矩                             | 6.0V                                     | ≥13 Kgf.cm (扭力计测试)           |               |
|             |   | 7.4V                                     | ≥16 Kgf.cm (扭力计测试)           |               |
| 7           | No Load Speed* 空载速度                           | 6.0V                                     | ≤0.16 Sec/60°                |               |
|             |   | 7.4V                                     | ≤0.12Sec/60°                 |               |
| 8           | Rotating Direction 旋转方向                       | (500us→2500us) 逆时针及正向                    |                              |               |
| 9           | Pulse Width Range 脉冲宽度范围                      | 500~2500 us                              |                              |               |
| 10          | Neutral Position 中位                           | 1500 us                                  |                              |               |
| 11          | Operating Travel Angle 操作角度                   | 180° ±10°(500~2500 us)                   |                              |               |
| 12          | Max. Operating Travel Angle 最大可操作角度           | 180°±10° (500~2500us)                    |                              |               |
| 13          | Mechanical Limit Angle 机械极限角度                 | 360°                                     |                              |               |
| 14          | Left & Right Travelling Angle Deviation 左右角度差 | ≤ 7°                                     |                              |               |
| 15          | Centering deviation 回中差                       | ≤ 1°                                     |                              |               |
| 16          | Back Lash* 虚位                                 | ≤ 1°                                     |                              |               |
| 17          | Dead Band Width 死区宽度                          | ≤ 5 us                                   |                              |               |
| 18          | Operating Temperature Range 工作温度              | -10℃ ~ +50℃                              |                              |               |
| 19          | Storage Temperature Range 储存温度                | -20℃ ~ +60℃                              |                              |               |
| 20          | Operating Humidity Range 工作湿度                 | ≤ 90%RH                                  |                              |               |
| 21          | Storage Humidity Range 储存湿度                   | ≤ 90%RH                                  |                              |               |
| 22          | Weight 重量                                     | 42.5± 0.5g                               |                              |               |
| 23          | Case Material 外壳材质                            | Plastic Casing + aluminium alloy 塑胶 + 铝框 |                              |               |
| 24          | Gear Set Material 齿轮材质                        | 金属齿轮                                     |                              |               |
| 25          | Reduction ratio 减速比                           | 1/183                                    |                              |               |
| 26          | Motor Type 马达类型                               | 铁芯马达                                     |                              |               |
| 27          | Position Detect System 位置检测系统                 | Type 类型                                  | Carbon-Film Potentiometer VR |               |
|             |   | Angle 角度                                 | 220°(无限位)                    |               |
|             |   | Life 寿命                                  | 100 0000Cycles Min           |               |
| 28          | Cable 电缆                                      | Type 类型                                  | #60 PVC                      |               |
|             |   | Length 长度                                | 295±5mm (不含插头)               | 耐磨线           |
| 29          | Horn Gear Spline 摇臂齿数                         | 25T/Φ5.9mm                               |                              |               |
| 30          | Horn Gear Type 摇臂类型                           | 见附图                                      |                              |               |
| 31          | Rocker Arm Screw 摇臂螺丝                         | PMΦ3X5/镀镍                                |                              |               |
| 32          | Connector 连接器                                 | Type 类型                                  | JR2.54/棕红橙                   |               |
|             |   | Pin Assignment 引脚定义                      | 1 棕 GND                      |               |
|             |   |  | 2 红 VCC                      |               |
| 3 橙 Signal/ |   |  |                              |               |

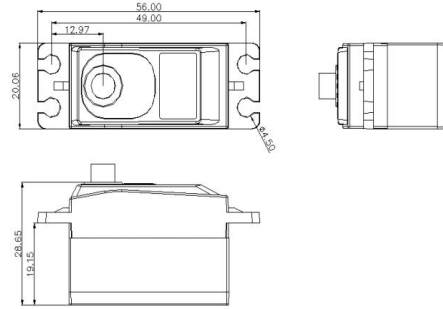
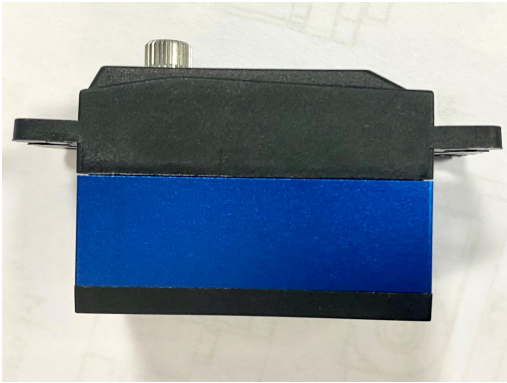


|    |                              |     |                       |  |
|----|------------------------------|-----|-----------------------|--|
| 33 | Communication Interface 通信协议 | PWM | Signal Voltage: V     | HIGH : Min,2.0V , Max. Vcc<br>LOW : Min,0.0V , Max.0.45V |
|    |                              |     | Frame Rate: T         | 3.0~30ms (Default 20ms)                                  |
|    |                              |     | Left/Center/Right: Td | 2000/1500/1000us   |
|    |                              |     | Resolution            | —  |



| 34 | Amplifier Type 放大器类型 | Digital |  |

Outside Dimension: (Unit: mm)

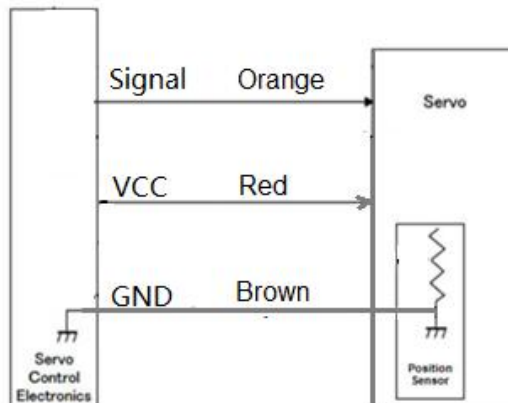


Picture 1-1



Picture 1-2

Electrical Schematic Diagram :



Picture 1-3

Remarks:  
\* At 23±5°C (Initial Performance Data)