



1. 使用環境條件

Apply Environmental Condition :

| No. | 項目 item | 規格 standard |
|-----|-------------------------------------|--------------|
| 1-1 | 保存溫度 Storage Temperature Range | -20°C ~ 60°C |
| 1-2 | 操作溫度 Operating Temperature Range | -10°C ~ 60°C |
| 1-3 | 操作電壓 Operating Voltage Range | 4.8V~6.0V |

2. 測試環境

Standard Test Environment :

| | | |
|-----|-----------------------------------|--|
| 2-1 | 測試環境 Standard Test Environment | 每一个检查必须是正常的温度和湿度进行测量，温度 25 ± 5°C，相对湿度 65 ± 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±5°C and relative humidity 65±10% of judgment made in accordance with this specification standard testing conditions. |
|-----|-----------------------------------|--|

3. 外觀檢查

Appearance Inspection :

| No. | 項目 item | 規格 standard |
|-----|-------------------------|--|
| 3-1 | 外觀尺寸 Outline Drawing | 尺寸见附件 Dimension see the attachment |
| 3-2 | 外觀 Appearance | 无损坏，不允许影响功能 No damage which affects functions allowed |



4. 電氣特性

Electrical Specification (Function of the Performance) :

| No. | 項目 item | 4.8V | 6.0V |
|-----|--------------------------------------|--------------|--------------|
| 4-1 | 空載轉速 Operating speed (at no load) | 0.09 sec/60° | 0.07 sec/60° |
| 4-2 | 空載電流 Running current (at no load) | ≦ 90 mA | ≦ 90 mA |
| 4-3 | 停止扭力 Stall torque (at locked) | 1.2 kg-cm | 1.6 kg-cm |
| 4-4 | 停止電流 Stall current (at locked) | 600 mA | 700 mA |
| 4-5 | 待機電流 Idle current (at stopped) | <50 mA | <50 mA |

注：項目 4-2 定义平均值时，伺服器无负荷运行

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

5. 機械特性

Mechanical Specification :

| No. | 項目 item | 规格 standard |
|-----|-------------------------------|---|
| 5-1 | 外觀尺寸 Overall Dimensions | 见附件 See the drawing |
| 5-2 | 機構極限角度 Limit angle | 360° |
| 5-3 | 重量 Weight | 5.8 ± 0.2 g |
| 5-4 | 導線規格 Connector wire gauge | Φ0.8-16 芯 PVC |
| 5-5 | 導線長度 Connector wire length | 160 ± 5 mm |
| 5-6 | 舵片規格 Horn gear spline | 20T/ φ 3.55mm |
| 5-7 | 舵片種類 Horn type | 十字, 圓盤, 條型 Cross , Disk, Double Flat |
| 5-8 | 減速比 Reduction ratio | 1/378 |



Product Name
数字伺服器 Digital Servo

Model No.
DSM44

Version
V1

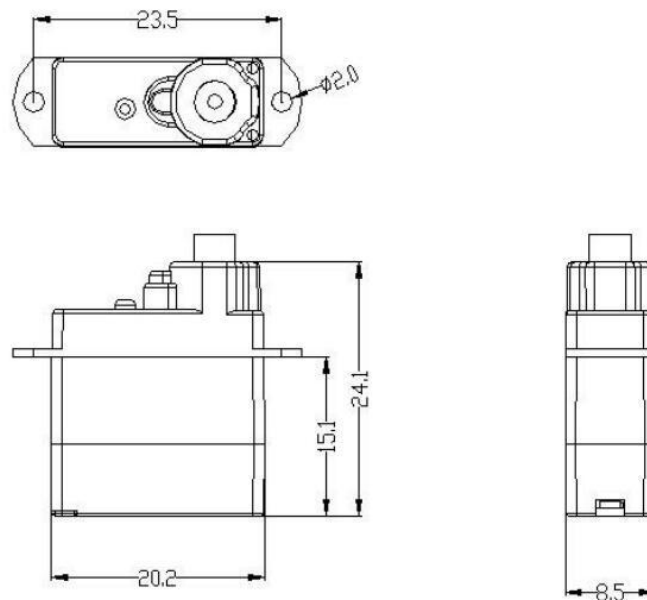
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6. 控制特性

Control Specification :

| No. | 項目 | 規格 |
|-----|-----------------------------|--|
| 6-1 | 控制系統 Control system | 改變脈衝寬度 Pulse Width Modification |
| 6-2 | 放大器種類 Amplifier type | 數字控制器 Digital Controller |
| 6-3 | 操作角度 Operating travel | $90^\circ \pm 10^\circ$ (在 $1000 \rightarrow 2000 \mu\text{sec}$) |
| 6-4 | 中立位置 Neutral position | $1500 \mu\text{sec}$ |
| 6-5 | 脈波訊號虛位 Dead band width | $\leq 5 \mu\text{sec}$ |
| 6-6 | 旋轉方向 Rotating direction | 逆時針 (在 $1000 \rightarrow 2000 \mu\text{sec}$) Counterclockwise (when $1000 \rightarrow 2000 \mu\text{sec}$) |
| 6-7 | 脈波寬度範圍 Pulse width range | $1000 \rightarrow 2000 \mu\text{sec}$ |
| 6-8 | 可作動角度範圍 Maximum travel | 大約 $145^\circ \pm 10^\circ$ (when $700 \rightarrow 2300 \mu\text{sec}$) Approx $145^\circ \pm 10^\circ$ (when $700 \rightarrow 2300 \mu\text{sec}$) |

單位：mm



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