



储能用铅酸蓄电池

LEAD-ACID STORAGE BATTERIES USED FOR ENERGY STORAGE JYHY12120(12V12AH)

JYHY12120 (12V12AH) lead-acid storage batteries used for energy storage, they are made with advanced technology which has long service life, low-self-discharge rate, particularly suitable for deep cycle usage and so on. applied for solar and windy power systems such as solar street lights、solar off-grid power station、windy power farms .etc.

JYHY12120 (12V12AH) 储能用铅酸蓄电池采用先进制造技术，具有使用寿命长、自放电率低、特别适合深循环使用等特点，适用于太阳能路灯、太阳能离网电站、风力发电场等太阳能、风能发电系统。

Specification 基本特性

- ◆UL、CE-recognized component.产品通过UL、CE认证
- ◆Can be mounted in any orientation.除倒置外，可任意方向安装使用
- ◆Computer designed lead,calcium tin alloy grid for high power density. 采用高锡铅钙多元合金板栅
- ◆Long service life,float or cyclic applications,float designed to use for 3-5 years. 浮充、循环使用寿命长，浮充使用设计寿命可达到3-5年
- ◆Maintenance-free operation 免维护使用
- ◆Absorbent Glass Mat(AGM) technology for efficient gas recombination of up to 99%,low gas escape . 采用AGM隔板高吸收技术，气体复合率可以达到99%，极少气体析出
- ◆SPECIFICATION 参数
Nominal voltage 额定电压12V
Number of cell 单格数.....6
Approx.weight 净重..... 3.4KG

产品尺寸(单位:毫米)Dimensions (Unit:mm) :151(L)×99(W)×100(H)

| | | |
|--|---|--|
| | 端子terminal | |
| | 导线wire: 长度length: 1100mm 线径the cross-sectional area of copper wire:1.5mm ² | |

电池结构Battery Construction

| 元件 Component | 正极板 positive plate | 负极板 negative plate | 胶壳 Container | 胶盖 Cover | 安全阀 Safety valve | 端子/导线 Terminal/wire | 隔板 Separator |
|--------------------|-----------------------|-----------------------|-----------------|-------------|---------------------|------------------------|--------------------|
| 原料 Raw material | 二氧化铅 Lead dioxide | 铅 Lead | ABS | ABS | 橡胶 Rubber | 铜 Copper | 玻璃纤维 Fiberglass |

恒流放电特性Constant current discharge characteristicsUnit:A(25°C)

| F.V/TIME | 10min | 15min | 30min | 60min | 2h | 3h | 4h | 5h | 8h | 10h | 20h |
|----------|-------|-------|-------|-------|------|------|------|------|------|------|------|
| 9.60V | 28.80 | 22.80 | 12.72 | 7.20 | 4.26 | 3.06 | 2.45 | 2.08 | 1.34 | 1.13 | 0.61 |
| 9.90V | 27.96 | 22.20 | 12.48 | 7.08 | 4.24 | 3.05 | 2.44 | 2.06 | 1.34 | 1.13 | 0.61 |
| 10.2V | 26.76 | 21.48 | 12.12 | 6.89 | 4.20 | 3.02 | 2.41 | 2.05 | 1.33 | 1.13 | 0.60 |
| 10.5V | 25.68 | 20.76 | 11.80 | 6.74 | 4.14 | 3.00 | 2.40 | 2.04 | 1.32 | 1.09 | 0.60 |
| 10.8V | 24.24 | 19.56 | 11.36 | 6.62 | 4.03 | 2.92 | 2.33 | 1.98 | 1.28 | 1.08 | 0.59 |

恒功率放电特性Constant power discharge characteristicsUnit:W(25°C)

| F.V/TIME | 10min | 15min | 30min | 60min | 2h | 3h | 4h | 5h | 8h | 10h | 20h |
|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 9.60V | 325.2 | 260.4 | 145.2 | 90.36 | 49.92 | 36.36 | 29.16 | 24.84 | 16.2 | 13.56 | 7.308 |
| 9.90V | 315.6 | 253.2 | 142.8 | 88.92 | 49.56 | 36.12 | 29.04 | 24.72 | 16.08 | 13.56 | 7.284 |
| 10.2V | 302.4 | 244.8 | 138 | 86.76 | 49.2 | 35.88 | 28.8 | 24.48 | 15.96 | 13.44 | 7.248 |
| 10.5V | 289.2 | 236.4 | 135.6 | 84.96 | 48.36 | 35.64 | 28.56 | 24.36 | 15.84 | 13.44 | 7.2 |
| 10.8V | 272.4 | 223.2 | 129.6 | 82.32 | 47.16 | 34.56 | 27.72 | 23.64 | 15.36 | 13.08 | 7.056 |

All mentioned values are average values

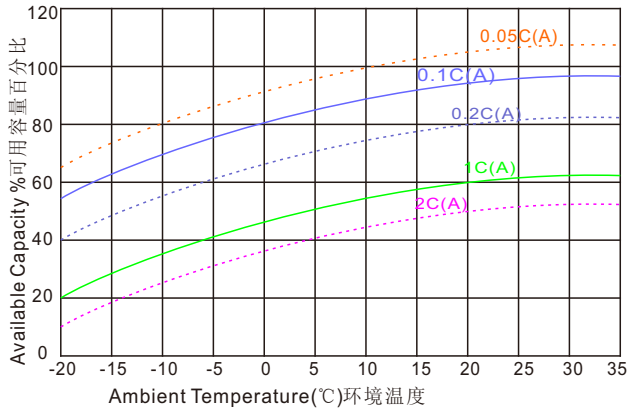
Performance Characteristics 性能参数

| | | |
|--|---|---------------------|
| 额定容量 Capacity 77° F (25° C) | 20小时率 hour rate(0.6A, 10.5V) | 12Ah |
| | 10小时率 hour rate(1.09A, 10.5V) | 10.9Ah |
| | 1小时率 hour rate(7.2A, 9.6V) | 7.2Ah |
| 内阻 Internal Resistance Approx.18mΩ | | |
| 适用温度范围 Operating Temperature Range | Discharge:-20°C-60°C | 放电(温度范围) |
| | Charge:0°C-50°C | 充电(温度范围) |
| | Storage:-20°C-60°C | 储存(温度范围) |
| 标准适用温度范围 Normal Operating Temperature Range:25°C±5°C | | |
| 自放电 Self-Discharge | 该电池在常温25摄氏度的环境下至少可以储存12个月,电池在使用之前先充电,储存时环境温度越高,它的储存周期越短。 the battery can be stored for more than 12 months at 25°C,please charge batteries before using .For higher temperature,the time interval will be shorter. | |
| 每月自放电率≤1.3% Self discharge rate ≤ 1.3% monthly | | |
| 最大放电电流 Max,discharge current (25° C) : 150A(5S) | | |
| 恒压充电 Charger (Constant Voltage) | 浮充使用 Float charging Voltage | 13.6 ~ 13.8V (25°C) |
| | 循环使用 Cycle Use | 14.6 ~ 14.8V (25°C) |
| 建议最大充电电流 Recommended Maximum Current Limit: 3.6A | | |

ISO9001:2008 Certificate

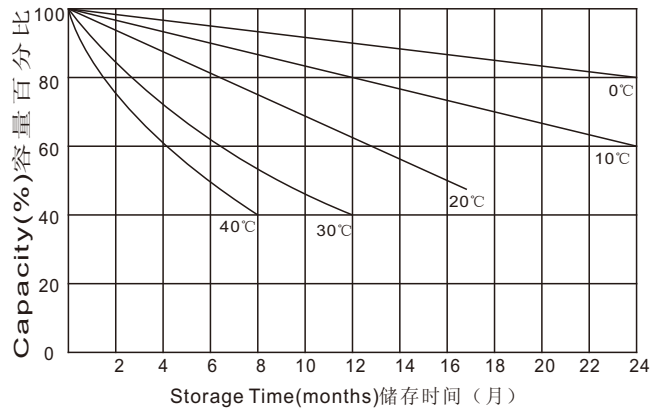
温度对容量影响曲线图

Effect of temperature on the capacity curve



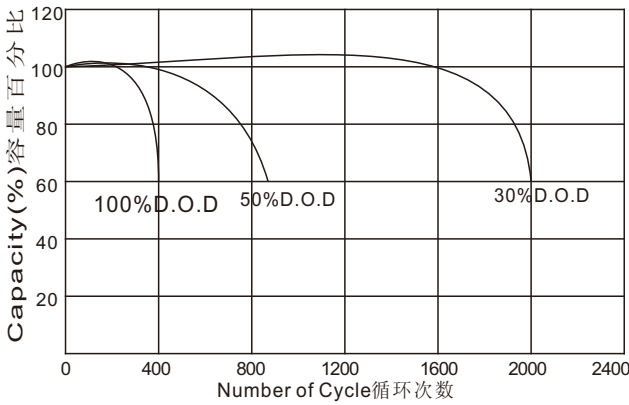
储存特性

Storage characteristic



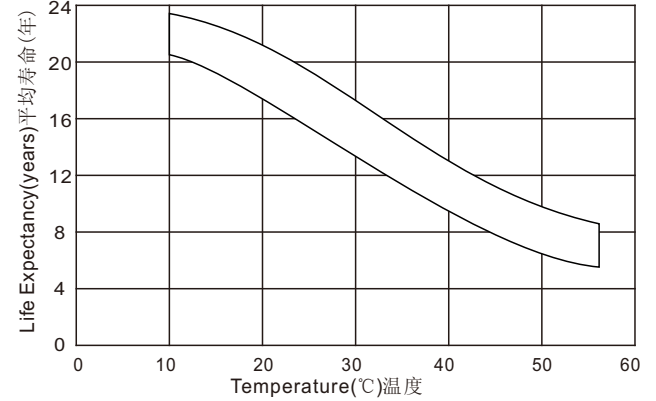
循环使用寿命

Life characteristics of cyclic use



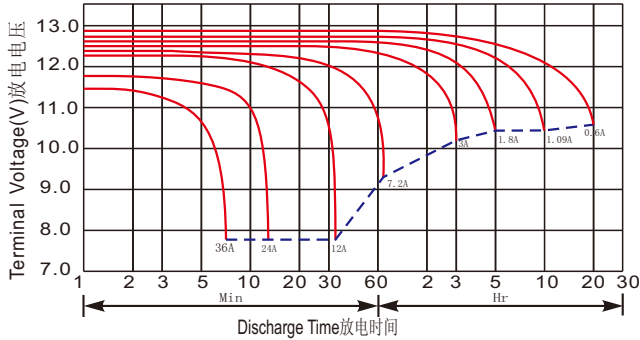
温度对长期浮充使用寿命的影响

Effect of temperature on long term float life



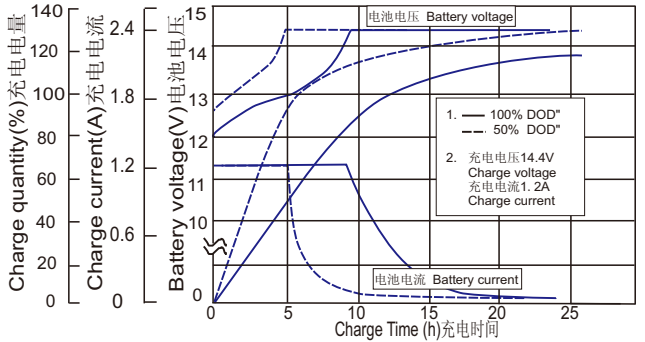
放电特征曲线

Discharge characteristics at various rates



充电特征曲线(循环使用)

Charge characteristics for cycle use



充电方法

Charging Procedures(12V series)

| 使用方式 Application | Charge Voltage(V) 充电电压 | | | 最大电流 Max. Charge Current |
|---------------------|------------------------|-------------------|---------------------------|-----------------------------|
| | 温度 Temperature | 设置电压 Set point | 允许使用范围 Allowable range | |
| 循环使用 Cycle use | 25°C | 14.8 | 14.6 ~ 14.8 | 0.3C |
| 浮充使用 Standby | 25°C | 13.7 | 13.6 ~ 13.8 | 0.3C |

放电电流与放电电压

Discharge Current VS. Discharge Voltage

| 终止电压 Final Discharge Voltage V/cell | 1.75V | 1.70V | 1.60V |
|--|------------|-------------------|------------|
| 放电电流 Discharge Current(A) | (A) ≤ 0.2C | 0.2C < (A) < 1.0C | (A) ≥ 1.0C |