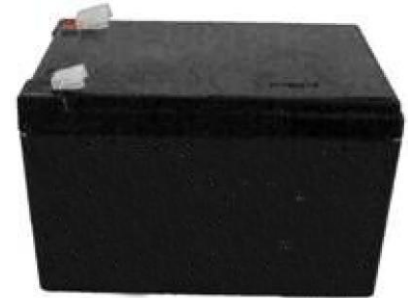


DC Series

Deep Cycle series batteries are designed to have a large amount of stored current discharged between charging sessions, with very heavy non-porous battery plates to withstand repeated major discharging and charging cycle(deep cycle). The Deep-cycle batteries uses a different chemistry for the plates active paste material, and a slightly stronger electrolyte than normal battery electrolyte, which allows for a much longer life in deep cycle applications.

DC12120

(12V12.0Ah/20hr)

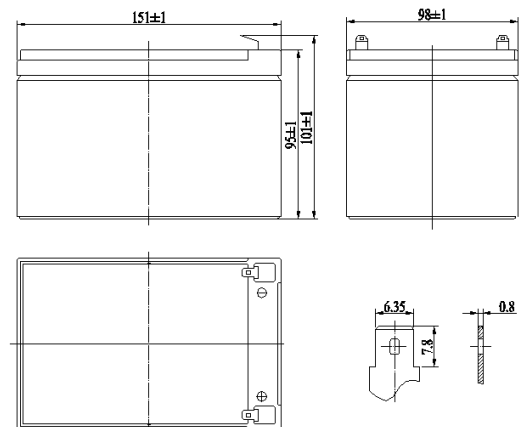


Application

- Alarm System
- Cable Television
- Power tools
- Emergency Power System
- Security System
- Medical Equipment
- Solar and Wind Power System
- Communication Equipment
- Control Equipment
- Toys

General Features

- Sealed and maintenance free operation.
- Non-Spillable construction design.
- ABS containers and covers (UL94HB, UL94V-0) optional.
- Safety valve installation for explosion proof .
- High quality and high reliability.
- Exceptional deep discharge recovery performance.
- Low self discharge characteristic.
- Flexibility design for multiple install positions.



CONSTRUCTION

| Component | Positive plate | Negative plate | Container | Cover | Safety valve | Terminal | Separator | Electrolyte |
|--------------|----------------|----------------|-----------|-------|--------------|----------|------------|---------------|
| Raw material | Lead dioxide | Lead | ABS | ABS | Rubber | Copper | Fiberglass | Sulfuric acid |

TECHNOLOGY PARAMETER

| Battery model | DC12120 | | | |
|-------------------------------------|---|--------------------|----------------------|-------------------|
| Designed Cycle Life | > 350 Cycles @ -0.5CA to 9.6V | | | |
| Capacity (25°C) | 20hR(0.6A, 10.5V) | 10hR(1.14A, 10.5V) | 5hR(2.06A, 10.5V) | 1hR(8.09A, 9.60V) |
| | 12.0Ah | 1.14Ah | 10.3Ah | 8.09Ah |
| Dimensions | Length | Width | Height | Total Height |
| | 151 ±1mm | 98 ±1mm | 95 ±1mm | 101 ±1mm |
| Approx. weight (±5%) | 3.3 Kg | | | |
| Internal resistance | Full charged at 25°C: Approx. 18mOhms | | | |
| Self discharge | 3% of capacity declined per month at 25°C (average) | | | |
| Capacity Affected by Temp.(20HR) | 40 °C | 25 °C | 0 °C | -15 °C |
| | 102% | 100% | 85% | 65% |
| Charge Voltage (25°C) | Cycle use | | Float use | |
| | 14.4-14.7V(-30mV/°C), max. Current: 3.6A | | 13.6-13.8V(-20mV/°C) | |



Valve Regulated Lead Acid batteries

Deep Cycle SLA battery (DC Series)

DC12120 (12V12.0Ah/20hr)

Constant current discharge ratings-amperes at 25°C

| End Point Volts/Cell | 5min | 10min | 15min | 30min | 1h | 3h | 5h | 10h | 20h |
|-------------------------|------|-------|-------|-------|------|------|------|------|-------|
| 1.60V | 45.4 | 32.0 | 24.4 | 13.5 | 7.93 | 3.34 | 2.10 | 1.22 | 0.621 |
| 1.65V | 43.6 | 30.8 | 23.7 | 13.0 | 7.55 | 3.23 | 2.08 | 1.19 | 0.616 |
| 1.70V | 41.1 | 29.6 | 23.2 | 12.5 | 7.19 | 3.12 | 2.04 | 1.16 | 0.608 |
| 1.75V | 38.5 | 28.4 | 22.3 | 12.0 | 6.82 | 2.99 | 2.02 | 1.14 | 0.600 |
| 1.80V | 36.0 | 27.2 | 21.5 | 11.5 | 6.68 | 2.85 | 1.98 | 1.11 | 0.589 |

Constant power discharge ratings-watts at 25°C

| End Point Volts/Cell | 5min | 10min | 15min | 30min | 1h | 3h | 5h | 10h | 20h |
|-------------------------|------|-------|-------|-------|------|------|------|------|------|
| 1.60V | 84.0 | 59.2 | 45.5 | 25.3 | 14.9 | 6.30 | 4.00 | 2.32 | 1.19 |
| 1.65V | 80.2 | 56.6 | 43.9 | 24.2 | 14.1 | 6.07 | 3.92 | 2.26 | 1.18 |
| 1.70V | 75.1 | 54.2 | 42.6 | 23.2 | 13.4 | 5.84 | 3.84 | 2.20 | 1.16 |
| 1.75V | 70.1 | 51.7 | 40.7 | 22.1 | 12.6 | 5.55 | 3.78 | 2.14 | 1.13 |
| 1.80V | 64.9 | 49.0 | 39.0 | 21.0 | 12.2 | 5.25 | 3.67 | 2.07 | 1.10 |

