

SB1275 12V 7.5Ah(20hr)

The rechargeable batteries are lead-lead dioxide systems. The dilute sulfuric acid electrolyte is absorbed by separators and plates and thus immobilized. Should the battery be accidentally overcharged producing hydrogen and oxygen, special one-way valves allow the gases to escape thus avoiding excessive pressure build-up. Otherwise, the battery is completely sealed and is, therefore, maintenance-free, leak proof and usable in any position.

Battery Construction

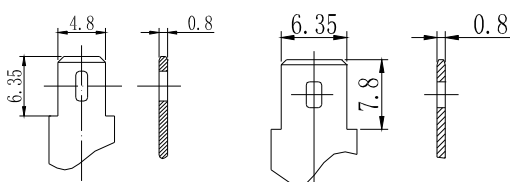
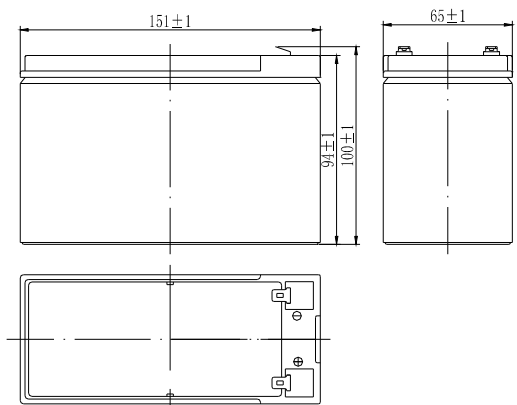
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|--------------|----------------|----------------|-----------|-------|--------------|----------|------------|---------------|
| Component | Positive plate | Negative plate | Container | Cover | Safety valve | Terminal | Separator | Electrolyte |
|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

General Features

- Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance or water adding.
- Not restricted for air transport-complies with IATA/ICAO Special Provision A67.
- UL-recognized component.
- Can be mounted in any orientation.
- Computer designed lead, calcium tin alloy grid for high power density.
- Long service life, float or cyclic applications.
- Maintenance-free operation.
- Low self discharge.

Dimensions and Weight

| | |
|--------------------------|------------|
| Length(mm / inch) | 151 / 5.94 |
| Width(mm / inch) | 65 / 2.56 |
| Height(mm / inch) | 94 / 3.70 |
| Total Height(mm / inch) | 100 / 3.94 |
| Approx. Weight(Kg / lbs) | 2.3 / 5.07 |



terminal
F1 (0.187)

terminal (optional)
F2 (0.250)

Performance Characteristics

| | |
|--|--------------|
| Nominal Voltage | 12V |
| Number of cell | 6 |
| Design Life | 5 years |
| Nominal Capacity 77°F(25°C) | |
| 20 hour rate (0.375A, 10.5V) | 7.5Ah |
| 10 hour rate (0.73A, 10.5V) | 7.3Ah |
| 5 hour rate (1.32A, 10.5V) | 6.6Ah |
| 1 hour rate (5.47A, 9.6V) | 5.47Ah |
| Internal Resistance | |
| Fully Charged battery 77°F(25°C) | 25mOhms |
| Self-Discharge | |
| 3% of capacity declined per month at 20°C(average) | |
| Operating Temperature Range | |
| Discharge | -20~60°C |
| Charge | -10~60°C |
| Storage | -20~60°C |
| Max. Discharge Current 77°F(25°C) | 115A(5s) |
| Short Circuit Current | 390A |
| Charge Methods: Constant Voltage Charge 77°F(25°C) | |
| Cycle use | 2.30-2.35VPC |
| Maximum charging current | 3.0A |
| Temperature compensation | -30mV/°C |
| Standby use | 2.23-2.27VPC |
| Temperature compensation | -20mV/°C |

Discharge Constant Current (Amperes at 77°F25°C)

| End Point Volts/cell | 5min | 10min | 15min | 30min | 1h | 3h | 5h | 10h | 20h |
|----------------------|------|-------|-------|-------|------|------|------|------|-------|
| 1.60V | 34.2 | 21.4 | 14.9 | 9.05 | 5.47 | 2.14 | 1.47 | 0.76 | 0.390 |
| 1.65V | 32.4 | 20.4 | 14.5 | 8.93 | 5.28 | 2.07 | 1.43 | 0.75 | 0.385 |
| 1.70V | 30.6 | 19.4 | 14.1 | 8.78 | 5.06 | 2.01 | 1.37 | 0.74 | 0.380 |
| 1.75V | 28.7 | 18.2 | 13.7 | 8.58 | 4.85 | 1.93 | 1.32 | 0.73 | 0.375 |
| 1.80V | 26.8 | 17.2 | 13.1 | 8.35 | 4.61 | 1.87 | 1.28 | 0.72 | 0.365 |

Discharge Constant Power (Watts at 77°F25°C)

| End Point Volts/cell | 5min | 10min | 15min | 30min | 45min | 1h | 2h | 3h | 5h |
|----------------------|------|-------|-------|-------|-------|------|------|------|------|
| 1.60V | 60.8 | 40.8 | 28.3 | 16.3 | 12.4 | 9.70 | 5.85 | 4.20 | 2.71 |
| 1.65V | 57.8 | 38.8 | 27.7 | 16.1 | 12.3 | 9.58 | 5.72 | 4.09 | 2.67 |
| 1.70V | 54.8 | 36.7 | 27.0 | 15.9 | 12.1 | 9.42 | 5.57 | 3.98 | 2.62 |
| 1.75V | 52.0 | 34.7 | 26.3 | 15.6 | 11.9 | 9.24 | 5.39 | 3.85 | 2.57 |
| 1.80V | 49.1 | 32.6 | 25.5 | 15.2 | 11.6 | 9.01 | 5.22 | 3.73 | 2.50 |

(Note)The above characteristics data are average values obtained within three charge/discharge cycles not the minimum values.

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