

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

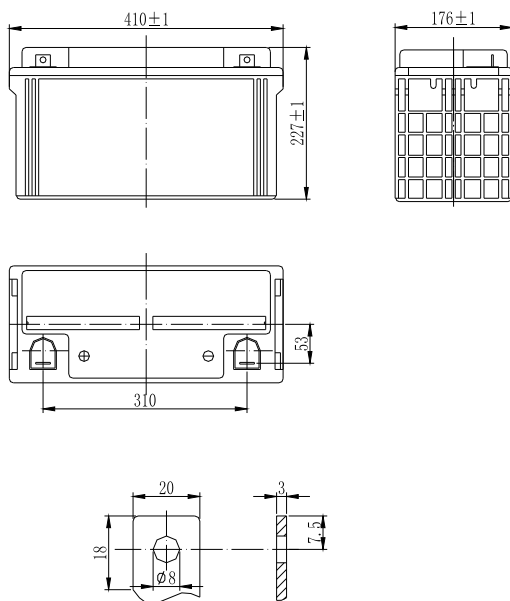
| | | | | | | | | |
|--------------|----------------|----------------|-----------|-------|--------------|----------|------------|---------------|
| Component | Positive plate | Negative plate | Container | Cover | Safety valve | Terminal | Separator | Electrolyte |
| Raw material | Lead dioxide | Lead | 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).....410 / 16.14
 Width(mm / inch).....176 / 6.93
 Height(mm / inch).....227 / 8.94
 Total Height(mm / inch).....227 / 8.94
 Approx. Weight(Kg / lbs).....38 / 83.8



Performance Characteristics

Nominal Voltage12V
 Number of cell6
 Design Life10 years
 Nominal Capacity 77°F(25°C)
 20 hour rate (6A, 10.5V)..... 120Ah
 10 hour rate (11.4A, 10.5V)..... 114Ah
 5 hour rate (19.6A, 10.5V)..... 98Ah
 1 hour rate (76.4A, 9.6V)..... 76.4Ah
 Internal Resistance
 Fully Charged battery 77°F(25°C)..... 4.3mOhms
 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)950A(5s)
 Short Circuit Current 2250A
 Charge Methods: Constant Voltage Charge 77°F(25°C)
 Cycle use 14.4-14.7V
 Maximum charging current 36A
 Temperature compensation -30mV/°C
 Standby use 13.6-13.8V
 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 | 359 | 272 | 220 | 122 | 76.4 | 30.5 | 20.7 | 11.7 | 6.22 |
| 1.65V | 336 | 257 | 212 | 119 | 75.8 | 29.9 | 20.5 | 11.6 | 6.16 |
| 1.70V | 312 | 243 | 203 | 115 | 74.3 | 29.3 | 20.1 | 11.5 | 6.08 |
| 1.75V | 289 | 228 | 194 | 110 | 72.0 | 28.6 | 19.6 | 11.4 | 6.00 |
| 1.80V | 266 | 214 | 186 | 108 | 69.8 | 27.8 | 19.3 | 11.2 | 5.90 |

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

| End Point Volts/Cell | 5min | 10min | 15min | 30min | 45min | 1h | 2h | 3h | 5h |
|----------------------|------|-------|-------|-------|-------|-----|------|------|------|
| 1.60V | 608 | 484 | 386 | 234 | 166 | 153 | 84.3 | 59.5 | 41.7 |
| 1.65V | 577 | 460 | 373 | 227 | 163 | 151 | 82.8 | 58.8 | 41.5 |
| 1.70V | 547 | 436 | 361 | 220 | 159 | 149 | 81.3 | 58.1 | 41.2 |
| 1.75V | 517 | 413 | 348 | 213 | 155 | 145 | 79.8 | 57.4 | 41.0 |
| 1.80V | 484 | 386 | 336 | 206 | 152 | 140 | 79.0 | 56.4 | 40.6 |

