



KB1250F1 12V 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

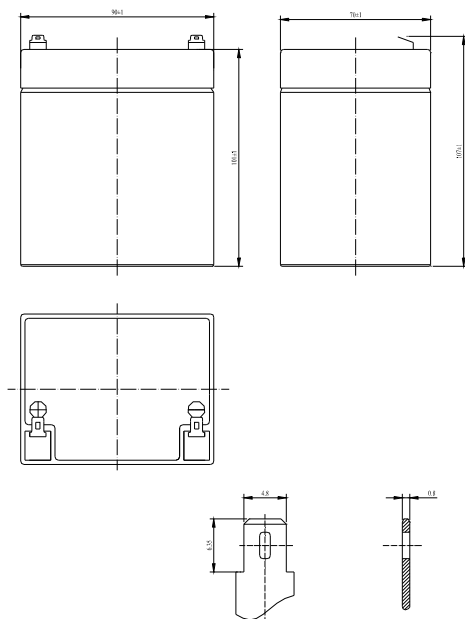
| Component | Positive plate | Negative plate | Container | Cover | Safety valve | Terminal | Separator | Electrolyte |
|--------------|----------------|----------------|-----------|-------|--------------|----------|------------|---------------|
| Raw material | Lead dioxide | Lead | ABS | ABS | Rubber | 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) | 90 / 3.54 |
| Width(mm / inch) | 70 / 2.76 |
| Height(mm / inch) | 101 / 3.98 |
| Total Height(mm / inch) | 107 / 4.21 |
| Approx. Weight(Kg / lbs) | 1.8 / 3.97 |



Performance Characteristics

| | |
|--|------------|
| Nominal Voltage | 12V |
| Number of cell | 6 |
| Design Life | 3-5 years |
| Nominal Capacity 77°F(25°C) | |
| 20 hour rate (0.25A, 10.5V) | 5Ah |
| 10 hour rate (0.5A, 10.5V) | 5Ah |
| 5 hour rate (0.96A, 10.5V) | 4.8Ah |
| 1 hour rate (4.1A, 9.6V) | 4.1Ah |
| Internal Resistance | |
| Fully Charged battery 77°F(25°C) | 32mOhms |
| 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) | 75A(5s) |
| Short Circuit Current | 270A |
| Charge Methods: Constant Voltage Charge 77°F(25°C) | |
| Cycle use | 14.5-14.9V |
| Maximum charging current | 2A |
| 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 | 26.5 | 17.0 | 13.0 | 7.00 | 4.10 | 1.55 | 1.01 | 0.52 | 0.27 |
| 1.65V | 25.4 | 16.4 | 12.5 | 6.81 | 4.02 | 1.51 | 0.98 | 0.51 | 0.26 |
| 1.70V | 24.3 | 15.7 | 11.9 | 6.62 | 3.93 | 1.48 | 0.97 | 0.50 | 0.26 |
| 1.75V | 23.1 | 15.1 | 11.4 | 6.41 | 3.85 | 1.44 | 0.96 | 0.50 | 0.25 |
| 1.80V | 21.8 | 14.4 | 10.8 | 6.20 | 3.76 | 1.40 | 0.95 | 0.50 | 0.25 |

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

| End Point Volts/Cell | 5min | 10min | 15min | 30min | 45min | 1h | 2h | 3h | 5h |
|----------------------|------|-------|-------|-------|-------|-----|------|------|------|
| 1.60V | 49.5 | 31.2 | 23.5 | 13.3 | 10.00 | 8.0 | 4.40 | 3.05 | 2.01 |
| 1.65V | 47.1 | 30.6 | 22.7 | 13.0 | 9.75 | 7.8 | 4.30 | 2.99 | 1.98 |
| 1.70V | 44.8 | 30.0 | 22.0 | 12.6 | 9.50 | 7.6 | 4.21 | 2.93 | 1.95 |
| 1.75V | 42.3 | 29.5 | 21.3 | 12.3 | 9.25 | 7.4 | 4.12 | 2.86 | 1.91 |
| 1.80V | 39.8 | 28.8 | 20.5 | 11.9 | 9.00 | 7.2 | 4.02 | 2.80 | 1.88 |

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

