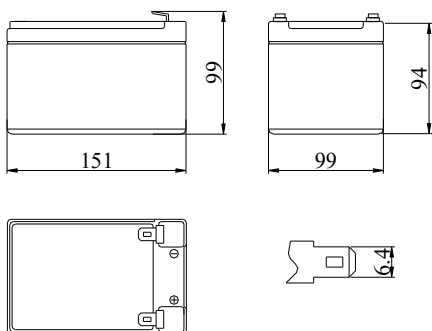


12V12Ah

The battery is constructed by plates, separators, safety valves and container.
 Since the electrolyte is held by a glassmat separator and plates, the battery can use in any direction and position without leakage.

Outer Dimensions



Dimensions and Weight

| | |
|---------------------------------|------------|
| Length (mm / inch)..... | 151 / 5.94 |
| Width (mm / inch) | 99 / 3.90 |
| Height (mm / inch) | 94 / 3.70 |
| Total Height (mm / inch)..... | 99 / 3.90 |
| Approx.Weight(Kg / lbs)..... | 3.25/ 7.15 |

Performance Characteristics

| | |
|--|----------|
| Nominal Voltage | 12V |
| Number of cell | 6 |
| Design Life | 5 years |
| Nominal Capacity 77°F(25°C) | |
| 20 hour rate(0.60A,10.5V) | 12.0Ah |
| 10 hour rate(1.12A,10.5V) | 11.2Ah |
| 5 hour rate (2.04 A,10.5V) | 10.2Ah |
| 1 hour rate(7.8A,9.6V) | 7.8Ah |
| Internal Resistance | |
| Fully Charged battery 77°F(25°C) | 30 mΩ |
| Self-Discharge | |
| 3% of capacity declined per month at 20°C(average) | |
| Operation Temperature Range | |
| Discharge | -20~60°C |
| Charge | -10~60°C |
| Storage | -20~60°C |
| Max.Discharge Current 77°F(25°C) | 144A(5s) |
| Short Circuit Current | 180A |

Battery Construction

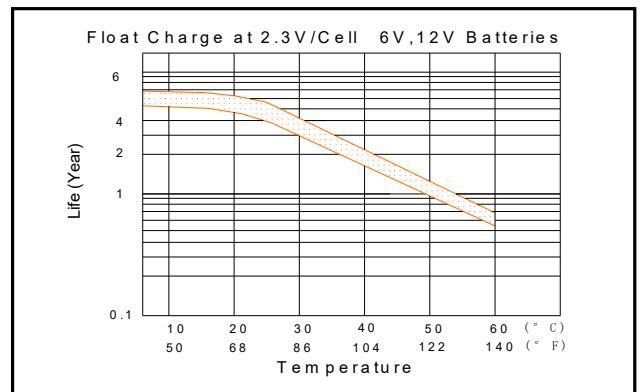
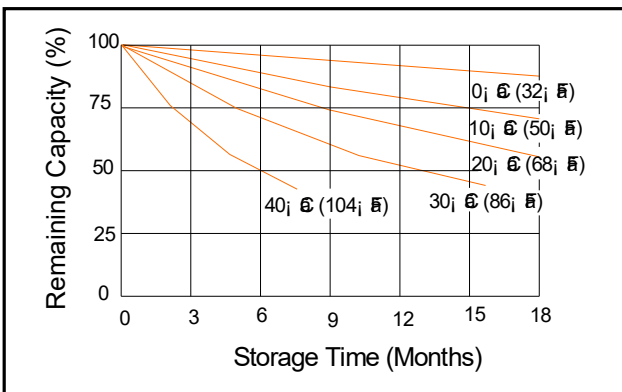
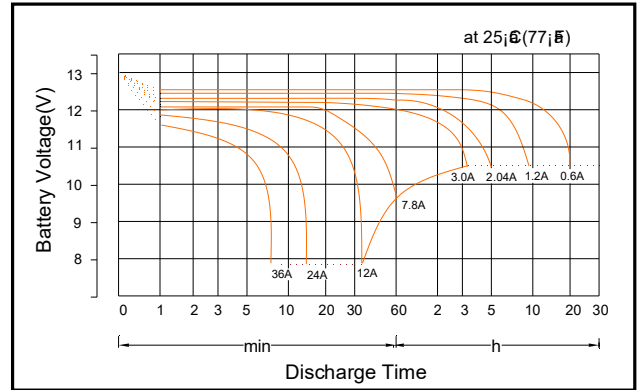
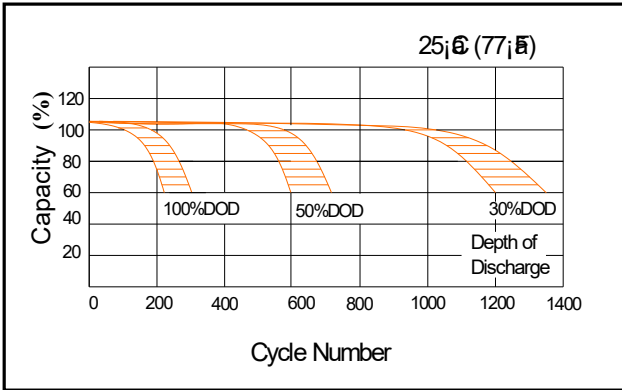
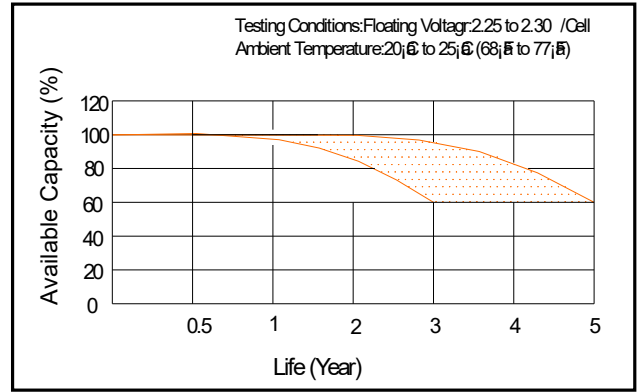
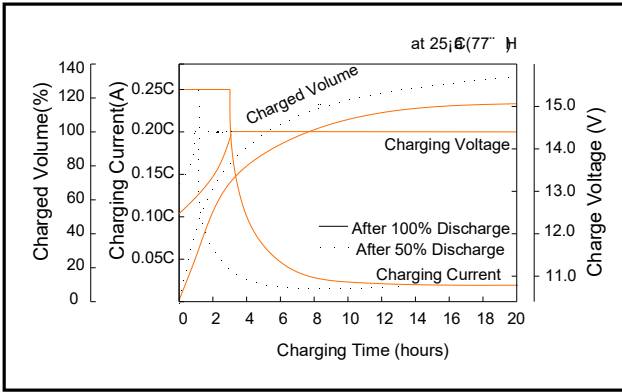
| COMPONENT | Positive plate | Negative plate | Container | Cover | Safety valve | Terminal | Separator | Electrolyte |
|--------------|----------------|----------------|-----------|-------|--------------|----------|------------|---------------|
| RAW MATERIAL | Lead dioxide | Lead | ABS | ABS | Rubber | Copper | Fiberglass | Sulfuric acid |

Charging Methods

| Application | Charging method | Charging Voltage at 25°C | Temperature compensation coefficient of charging voltage | Max.charging current | Charging time 25°C(h) | | Temp (°C) |
|--------------------------|---|--------------------------|--|----------------------|-----------------------|---------------|--------------------|
| | | | | | 100% discharge | 50% discharge | |
| For standby power source | Constant voltage & Constant Current Charging (with current restriction) | 13.4-13.8V | -18 mV/°C | 3.6A | 24 | 20 | 0~40 (32~104°F) |
| For cycle service | | 14.5-15.0V | -30 mV/°C | 3.6A | 16 | 10 | |

*Temperature compensation of charging voltage is not needed when using the batteries within 15°C to 35°C range.

12V12Ah



Discharge Constant Current (Amperes at 77°F/25°C)

| F.V/Time | 5min | 10min | 15min | 30min | 45min | 1h | 2h | 3h | 5h | 8h | 10h | 20h |
|----------|------|-------|-------|-------|-------|------|------|------|------|------|------|------|
| 1.60V | 42.0 | 33.6 | 24.0 | 13.8 | 9.84 | 7.80 | 4.20 | 3.04 | 2.06 | 1.36 | 1.13 | 0.61 |
| 1.65V | 40.8 | 32.4 | 22.8 | 13.6 | 9.72 | 7.74 | 4.16 | 3.02 | 2.05 | 1.36 | 1.13 | 0.61 |
| 1.70V | 38.4 | 30.0 | 21.6 | 13.2 | 9.60 | 7.68 | 4.14 | 3.00 | 2.04 | 1.34 | 1.12 | 0.60 |
| 1.75V | 33.6 | 25.2 | 20.4 | 12.5 | 9.48 | 7.56 | 4.08 | 2.96 | 2.04 | 1.33 | 1.12 | 0.60 |
| 1.80V | 30.0 | 21.6 | 19.2 | 10.8 | 9.36 | 7.44 | 3.96 | 2.88 | 2.02 | 1.33 | 1.09 | 0.59 |

Discharge Constant Power (Watts/cell at 77°F/25°C)

| F.V/Time | 5min | 10min | 15min | 30min | 45min | 1h | 2h | 3h | 5h | 8h | 10h | 20h |
|----------|------|-------|-------|-------|-------|------|------|------|------|------|------|------|
| 1.60V | 76.4 | 61.3 | 44.2 | 26.8 | 18.7 | 15.0 | 8.06 | 5.86 | 3.98 | 2.63 | 2.20 | 1.20 |
| 1.65V | 73.3 | 58.8 | 41.8 | 25.8 | 18.5 | 14.8 | 8.02 | 5.82 | 3.96 | 2.62 | 2.18 | 1.20 |
| 1.70V | 69.8 | 55.3 | 39.8 | 24.6 | 18.2 | 14.8 | 7.94 | 5.80 | 3.94 | 2.62 | 2.18 | 1.19 |
| 1.75V | 61.2 | 46.7 | 37.6 | 23.2 | 18.0 | 14.5 | 7.84 | 5.72 | 3.94 | 2.58 | 2.16 | 1.16 |
| 1.80V | 54.6 | 42.0 | 35.4 | 20.0 | 17.8 | 14.3 | 7.60 | 5.56 | 3.90 | 2.58 | 2.12 | 1.14 |

