

**MC 12-8 (12V8.0Ah/20hr)**

The rechargeable batteries are lead-lead dioxide systems. The dilute sulfuric acid electrolyte is absorbed by separators 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 Feature**

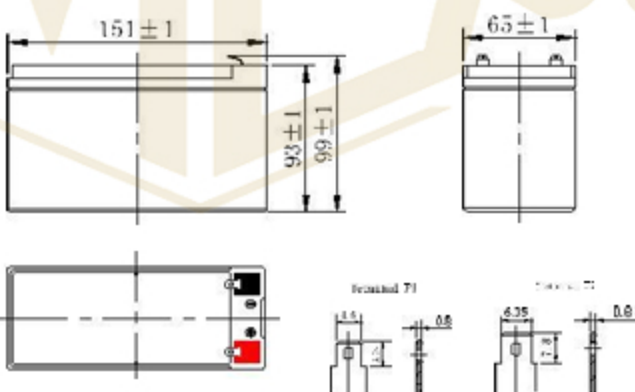
- Absorbent Glass Mat(AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance or water adding.
- Not restricted for air transport-complies with IATA/ICAO Special Provision A67.
- UL-recognized component.
- Can be mounted in any orientation.
- Computer designed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

**Performance Characteristics**

|   |  |       |
|---|--|-------|
| Capacity<br>77°F(25°C)                          | 20 hour rate (0.35A, 10.5V)                        | 8.0Ah |
|   | 10 hour rate (0.66A, 10.5V)                        | 7.2Ah |
|   | 5 hour rate (1.2A, 10.5V)                          | 6.5Ah |
|   | 1 hour rate (4.3A, 9.6V)                           | 4.8Ah |
| Internal Resistance                             | Full charged Battery 77°F(25°C): 22mΩ              |       |
| Capacity affected by Temperature (20 hour rate) | 104° F(40°C)                                       | 102%  |
|   | 77° F(25°C)  | 100%  |
|   | 32° F(10°C)  | 85%   |
|   | 5° F(-15°C)  | 65%   |
| Self-Discharge<br>68°F(20°C)                    | Capacity after 3 month storage                     | 90%   |
|   | Capacity after 6 month storage                     | 80%   |
|   | Capacity after 12month storage                     | 60%   |
| Max. discharge current 77°F(25°C): 105A(5S)     |  |       |
| Charge (Constant Voltage)                       | Float: 13.6~13.8 V/77° F(25°C)                     |       |
|   | Cycle: 14.5~14.9 V/77°F(25°C)<br>Max. Current 2.4A |       |

**SPECIFICATION**

- Nominal voltage ..... 12V
- Number of cell ..... 6
- Length(mm/inch) ..... 151/5.94
- Width(mm/inch) ..... 65/2.56
- Height(mm/inch) ..... 93/3.66
- Total Height(mm/inch) ..... 99/3.90
- Approx. Weight(kg/lbs) ..... 2.03/5.17



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

| End Point Volts/Cell | 5min | 10min | 15min | 30min | 1h   | 3h   | 5h   | 10h  | 20h  |
|----------------------|------|-------|-------|-------|------|------|------|------|------|
| 1.60V                | 28.0 | 17.6  | 14.2  | 8.00  | 4.30 | 1.89 | 1.26 | 0.69 | 0.35 |
| 1.65V                | 26.5 | 16.8  | 13.6  | 7.70  | 4.20 | 1.84 | 1.24 | 0.68 | 0.35 |
| 1.70V                | 25.0 | 16.0  | 13.0  | 7.39  | 4.10 | 1.80 | 1.22 | 0.67 | 0.35 |
| 1.75V                | 23.5 | 15.2  | 12.4  | 7.10  | 4.00 | 1.74 | 1.20 | 0.66 | 0.35 |
| 1.80V                | 22.1 | 14.4  | 11.8  | 6.83  | 3.90 | 1.68 | 1.18 | 0.65 | 0.34 |

Discharge Constant Power (watts at 77° F 25 °C)

| End Point Volts/Cell | 5min | 10min | 15min | 30min | 45min | 1h   | 2h   | 3h   | 5h   |
|----------------------|------|-------|-------|-------|-------|------|------|------|------|
| 1.60V                | 61.7 | 34.7  | 27.2  | 15.0  | 11.4  | 8.80 | 5.02 | 3.36 | 2.30 |
| 1.65V                | 49.2 | 33.0  | 26.1  | 14.4  | 10.8  | 8.40 | 4.89 | 3.47 | 2.26 |
| 1.70V                | 46.6 | 31.1  | 25.0  | 13.9  | 10.3  | 8.00 | 4.77 | 3.38 | 2.22 |
| 1.75V                | 44.1 | 29.3  | 24.1  | 13.3  | 9.90  | 7.60 | 4.62 | 3.28 | 2.18 |
| 1.80V                | 41.4 | 27.7  | 23.0  | 12.8  | 9.60  | 7.31 | 4.47 | 3.17 | 2.12 |

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

**MC 12-8 (12 V 8 Ah.)**

