

## VALVE REGULATED LEAD-ACID RECHARGEABLE BATTERY

### DC Series

Deep Cycle series batteries are designed to have a large amount of stored current discharged between charging sessions, with very heavy non-porous battery plates to withstand repeated major discharging and charging cycle(deep cycle). The Deep-cycle batteries uses a different chemistry for the plates active paste material, and a slightly stronger electrolyte than normal battery electrolyte, which allows for a much longer life in deep cycle applications.

**FL12150DC**

**(12V15.0Ah/20hr)**

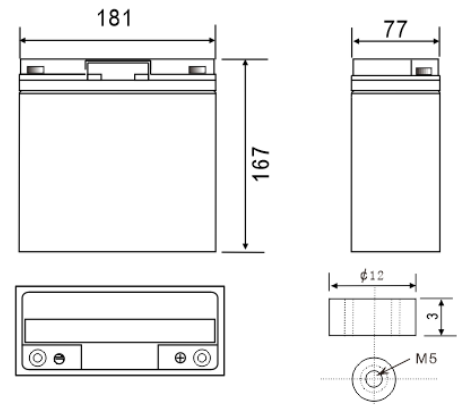


### Application

- Alarm System
- Medical Equipment
- Cable Television
- Solar and Wind Power System
- Power tools
- Communication Equipment
- Emergency Power System
- Control Equipment

### General Features

- Sealed and maintenance free operation.
- Non-Spillable construction design.
- ABS containers and covers (UL94HB, UL94V-0) optional.
- Safety valve installation for explosion proof .
- High quality and high reliability.
- Exceptional deep discharge recovery performance.
- Low self discharge characteristic.
- Flexibility design for multiple install positions.



### 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 |

### TECHNOLOGY PARAMETER

| Battery model                    | FL12150DC   |                    |                      |                   |
|----------------------------------|---|--------------------|----------------------|-------------------|
| Designed Cycle Life              | >350 Cycles @ -0.5CA to 9.6V                        |                    |                      |                   |
| Capacity (25°C)                  | 20HR(0.85A, 10.5V)                                  | 10HR(1.45A, 10.5V) | 5HR(2.86A, 10.5V)    | 1HR(11.4A, 9.60V) |
|                                  | 15Ah  | 14.5Ah             | 14.3Ah               | 11.4Ah            |
| Dimensions                       | Length  | Width              | Height               | Total Height      |
|                                  | 181.5±1mm   | 77±1mm             | 167±1mm              | 167±1mm           |
| Approx. weight (±3%)             | 4.30Kg (9.48 lbs)                                   |                    |                      |                   |
| Internal resistance              | Full charged at 25°C: Approx. 15mOhms               |                    |                      |                   |
| Self discharge                   | 3% of capacity declined per month at 25°C (average) |                    |                      |                   |
| Capacity Affected by Temp.(20HR) | 40 °C   | 25 °C              | 0 °C                 | -15 °C            |
|                                  | 102%  | 100%               | 85%                  | 65%               |
| Charge Voltage (25°C)            | Cycle use   |                    | Float use            |                   |
|                                  | 14.4-14.7V(-30mV/°C), max. Current: 5.1A            |                    | 13.6-13.8V(-20mV/°C) |                   |

## VALVE REGULATED LEAD-ACID RECHARGEABLE BATTERY

### FL12150DC (12V15.0Ah/20hr)

Constant current discharge ratings-amperes at 25°C

| End Point<br>Volts/Cell | 5min | 10min | 15min | 30min | 1h   | 3h   | 5h   | 10h  | 20h  |
|-------------------------|------|-------|-------|-------|------|------|------|------|------|
| 1.60V                   | 66.7 | 46.7  | 35.6  | 20.0  | 11.4 | 4.77 | 3.12 | 1.72 | 0.89 |
| 1.65V                   | 63.4 | 44.6  | 33.8  | 19.2  | 11.2 | 4.62 | 3.03 | 1.69 | 0.87 |
| 1.70V                   | 59.6 | 42.1  | 32.1  | 18.4  | 10.9 | 4.46 | 2.94 | 1.66 | 0.86 |
| 1.75V                   | 55.9 | 39.6  | 30.4  | 17.5  | 10.4 | 4.27 | 2.86 | 1.64 | 0.85 |
| 1.80V                   | 52.1 | 37.5  | 28.6  | 16.6  | 9.94 | 4.08 | 2.77 | 1.61 | 0.83 |

Constant power discharge ratings-watts at 25°C

| End Point<br>Volts/Cell | 5min | 10min | 15min | 30min | 1h   | 3h   | 5h   | 10h  | 20h  |
|-------------------------|------|-------|-------|-------|------|------|------|------|------|
| 1.60V                   | 123  | 86.4  | 66.1  | 37.4  | 21.4 | 9.02 | 5.92 | 3.29 | 1.71 |
| 1.65V                   | 117  | 82.1  | 62.6  | 35.8  | 20.9 | 8.68 | 5.73 | 3.22 | 1.67 |
| 1.70V                   | 109  | 77.1  | 59.0  | 34.0  | 20.3 | 8.35 | 5.53 | 3.14 | 1.64 |
| 1.75V                   | 102  | 72.1  | 55.6  | 32.2  | 19.3 | 7.94 | 5.34 | 3.08 | 1.61 |
| 1.80V                   | 93.8 | 67.6  | 51.8  | 30.2  | 18.2 | 7.50 | 5.13 | 2.99 | 1.56 |

