

## Electric Vehicle SLA Battery

## EVX SERIES

Bosfa EVX 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 cycles). The Bosfa EVX 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.

## Application

- Electric Powered Vehicles
- Golf Cars and Buggies
- Wheel Chairs
- Power Tools

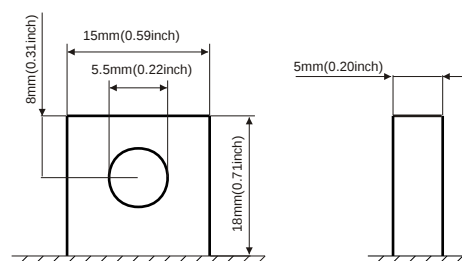
- Electric Powered Toys
- Control System
- Vacuum Cleaners
- Medical Equipments
- UPS
- Pvs

## General Features

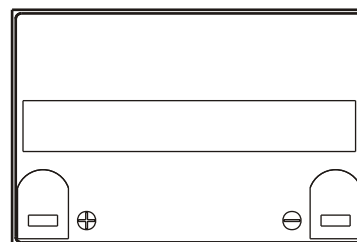
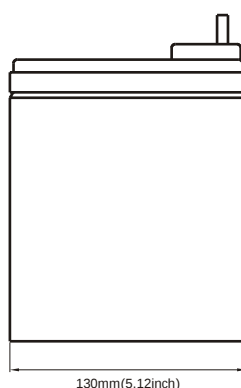
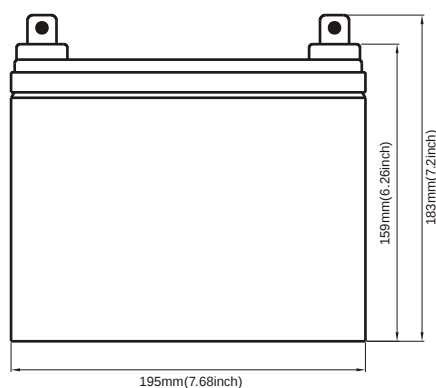
- Sealed and maintenance free operation.
- Non-Spillable construction design.
- ABS containers and covers(UL94HB, UL94V-0) optional.
- Safety valve installation for explosion proof.
- High quality and high reliability.
- Exceptional deep discharge recovery performance.
- Low self discharge characteristic.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

## Construction

- Component .....Raw material
- Positive .....Lead dioxide
- Negative .....Lead
- Container .....ABS
- Cover .....ABS
- Sealant .....Epoxy Resin
- Safety valve ....EPDR
- Terminal .....Copper
- Separator .....Fibre glass
- Electrolyte .....Sulfuric acid

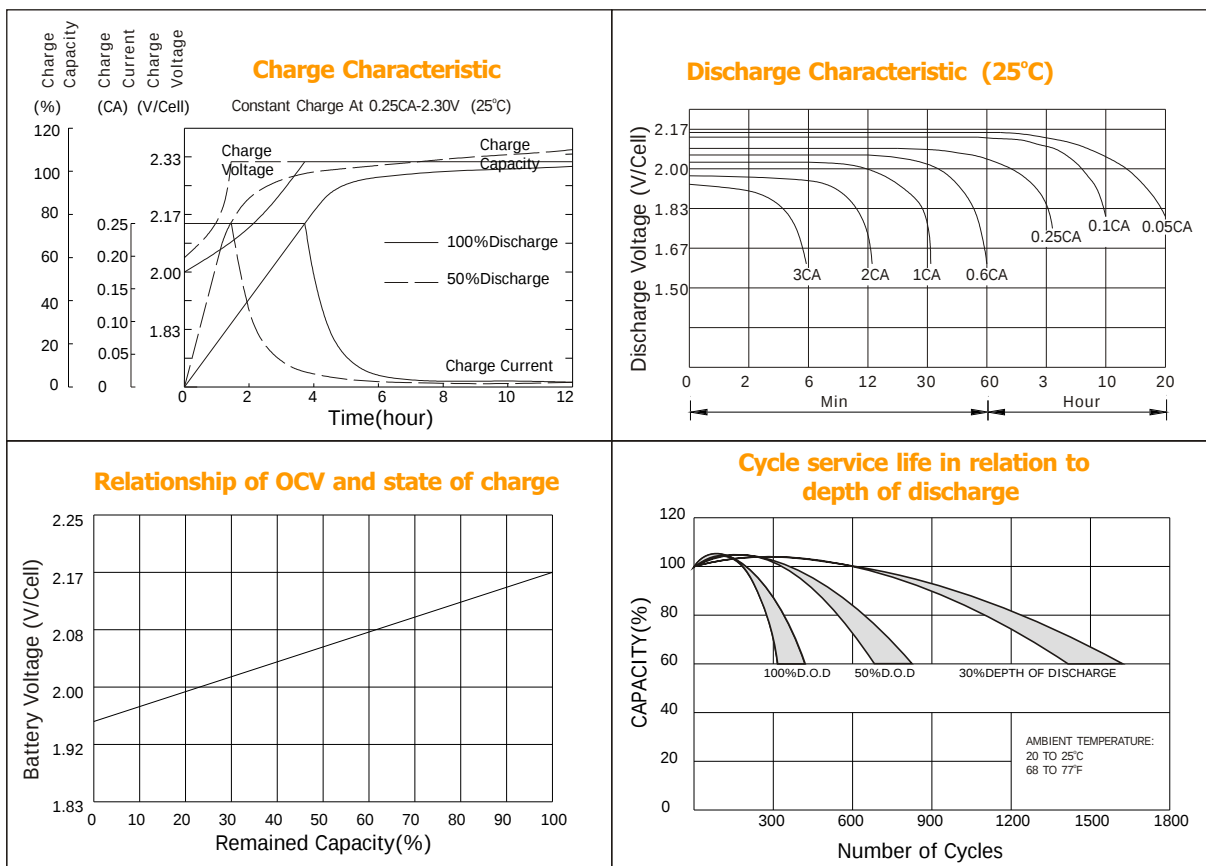


Terminal Dimensions



| Battery Model                    | EVX12-33                                    |                  |                       |                |
|----------------------------------|---------------------------------------------|------------------|-----------------------|----------------|
| Designed Cycle Life              | > 350 cycles @ 100% DOD                     |                  |                       |                |
| Capacity(25°C)                   | 20HR(1.8A,1.75V)                            | 10HR(3.3A,1.75V) | 5HR(5.2A,1.75V)       | 1HR(21A,1.75V) |
|                                  | 36AH                                        | 33AH             | 26AH                  | 21AH           |
| Dimensions                       | Length                                      | Width            | Height                | Total Height   |
|                                  | 195mm(7.68inch)                             | 130mm(5.12inch)  | 159mm(6.26inch)       | 183mm(7.2inch) |
| Approx. Weight                   | 11.8 Kg (26.02lbs)                          |                  |                       |                |
| Internal Resistance              | Full charged at 25°C: 0.009 Ohm             |                  |                       |                |
| Self Discharge                   | 3% of capacity declined per month at (25°C) |                  |                       |                |
| 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             |                |
|                                  | 14.4-15V(-30mV/ °C), max. Current: 8.25A    |                  | 13.6-13.8V(-20mV/ °C) |                |

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## Constant current discharge ratings-amperes at 25°C

| F. V/Time | 5MIN | 10MIN | 15MIN | 30MIN | 1HR  | 3HR  | 5HR  | 10HR | 20HR |
|-----------|------|-------|-------|-------|------|------|------|------|------|
| 1.60V     | 149  | 92.9  | 70.1  | 42.7  | 25.1 | 11.0 | 6.19 | 3.37 | 1.82 |
| 1.67V     | 140  | 88.1  | 67.4  | 40.9  | 24.8 | 10.6 | 6.06 | 3.34 | 1.76 |
| 1.70V     | 128  | 84.9  | 65.8  | 37.2  | 24.1 | 9.90 | 5.93 | 3.33 | 1.73 |
| 1.75V     | 126  | 82.3  | 63.7  | 35.3  | 22.9 | 9.57 | 5.80 | 3.31 | 1.69 |
| 1.80V     | 113  | 78.6  | 57.9  | 32.7  | 21.5 | 9.20 | 5.46 | 3.25 | 1.64 |
| 1.85V     | 99.4 | 74.8  | 52.0  | 30.1  | 20.0 | 8.87 | 5.11 | 3.20 | 1.59 |

## Constant power discharge ratings-watts at 25°C

| F. V/Time | 5MIN | 10MIN | 15MIN | 30MIN | 1HR  | 3HR  | 5HR  | 10HR | 20HR |
|-----------|------|-------|-------|-------|------|------|------|------|------|
| 1.60V     | 262  | 168   | 128   | 77.0  | 45.4 | 19.6 | 11.4 | 6.93 | 3.64 |
| 1.67V     | 253  | 163   | 126   | 75.4  | 45.1 | 19.0 | 11.3 | 6.89 | 3.51 |
| 1.70V     | 238  | 162   | 125   | 70.6  | 44.2 | 18.1 | 11.2 | 6.84 | 3.47 |
| 1.75V     | 239  | 161   | 124   | 68.5  | 43.5 | 17.7 | 11.1 | 6.76 | 3.38 |
| 1.80V     | 219  | 159   | 115   | 65.3  | 41.0 | 17.2 | 10.8 | 6.67 | 3.29 |
| 1.85V     | 199  | 151   | 104   | 61.1  | 38.5 | 16.6 | 10.4 | 6.58 | 3.16 |

