

## Deep Cycle SLA Battery

## Range Summary

By combining up-to-date DCP additives in the positive plates and special AGM separators, bosfa created an innovative range of DC batteries. The range features 70% higher cyclic life with 12 years of float life when compared with standard Duration range. The battery series is highly suited to very unreliable power applications requiring the batteries to provide extra cyclic life performance such as outdoor applications, small RE systems and electric vehicles.

## Application

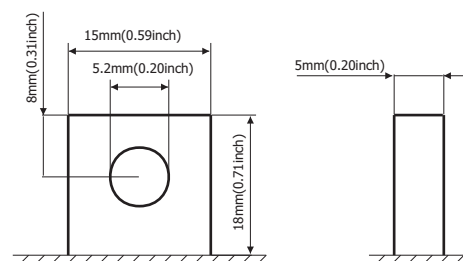
- Solar Energy System
- Golf Cars and Buggies
- Electric Powered Vehicles
- Wheel Chairs
- Power Tools
- Electric Powered Toys
- Control System
- Vacuum Cleaners
- Medical Equipments
- UPS

## General Features

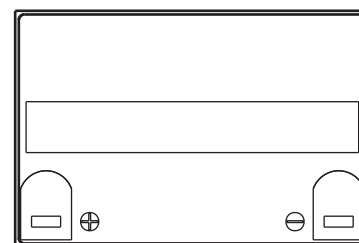
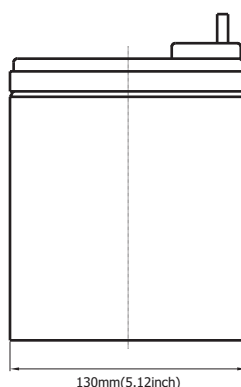
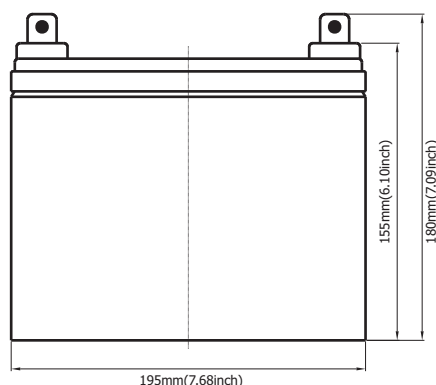
- Sealed and maintenance free operation.
- Non-Spillable construction design.
- ABS containers and covers(UL94 V0,optional).
- Safety valve installation for explosion proof.
- High quality and high reliability.
- Exceptional deep discharge recovery performance.
- Low self discharge characteristic.
- Flexible design for multiple installation positions.

## Construction

- Positive .....Lead dioxide
- Negative .....Lead
- Container .....ABS
- Cover .....ABS
- Sealant .....Epoxy Resin
- Safety valve ....EPDR
- Terminal .....Copper
- Separator .....AGM
- Electrolyte .....Sulfuric acid

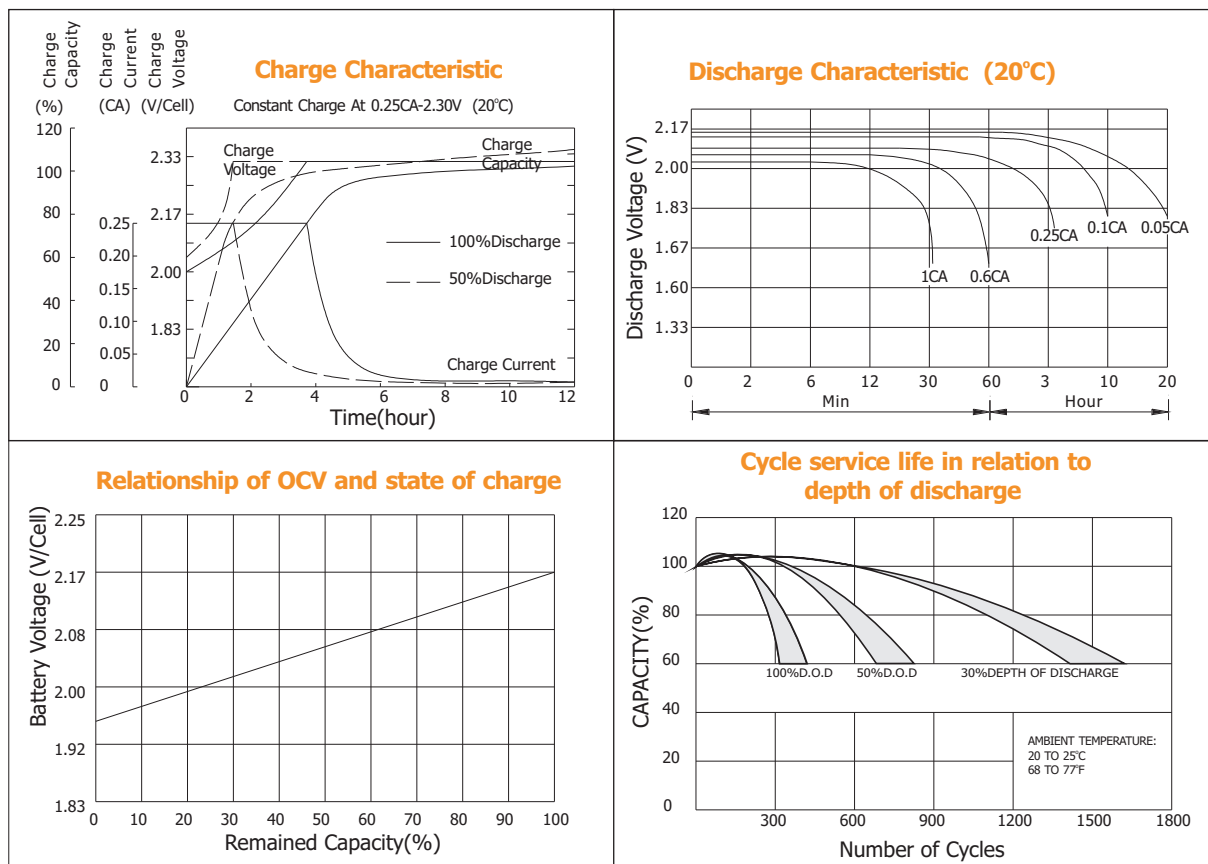


Terminal Dimensions



| Battery Model                    | DC 12-33                                    |                  |                       |                  |
|----------------------------------|---------------------------------------------|------------------|-----------------------|------------------|
| Designed Cycle Life              | > 350 cycles @ -0.5CA to 9.6V               |                  |                       |                  |
| Capacity(20°C)                   | 20HR(1.75A,1.80V)                           | 10HR(3.3A,1.80V) | 5HR(5.70A,1.75V)      | 1HR(20.5A,1.60V) |
|                                  | 35AH                                        | 33AH             | 28.5AH                | 20.5AH           |
| Dimensions                       | Length                                      | Width            | Height                | Total Height     |
|                                  | 195mm(7.68inch)                             | 130mm(5.12inch)  | 155mm(6.10inch)       | 180mm(7.09inch)  |
| Approx. Weight                   | 10.2Kg (22.5bs)                             |                  |                       |                  |
| Internal Resistance              | Full charged at 20°C: 0.01 Ohm              |                  |                       |                  |
| Self Discharge                   | 3% of capacity declined per month at (20°C) |                  |                       |                  |
| Capacity Affected by Temp.(20HR) | 40°C                                        | 20°C             | 0°C                   | -15°C            |
|                                  | 102%                                        | 100%             | 85%                   | 65%              |
| Charge Voltage(20°C)             | Cycle use                                   |                  | Float use             |                  |
|                                  | 14.4-14.8V(-30mV/ °C), max. Current: 8.25A  |                  | 13.6-13.8V(-20mV/ °C) |                  |

## Deep Cycle SLA Battery



## Constant current discharge ratings-amperes at 20°C

| F.V/Time | 5MIN  | 10MIN | 15MIN | 30MIN | 1HR  | 3HR  | 5HR  | 10HR | 20HR |
|----------|-------|-------|-------|-------|------|------|------|------|------|
| 1.60V    | 115.5 | 79.2  | 57.8  | 34.7  | 20.5 | 9.01 | 5.79 | 3.50 | 1.83 |
| 1.67V    | 104.0 | 72.3  | 56.1  | 33.7  | 20.4 | 8.98 | 5.75 | 3.45 | 1.82 |
| 1.70V    | 98.7  | 69.6  | 54.1  | 33.0  | 20.4 | 8.98 | 5.75 | 3.42 | 1.82 |
| 1.75V    | 87.8  | 64.4  | 51.2  | 32.3  | 20.2 | 8.91 | 5.70 | 3.36 | 1.81 |
| 1.80V    | 79.2  | 59.7  | 48.8  | 31.4  | 19.9 | 8.88 | 5.65 | 3.30 | 1.75 |
| 1.85V    | 60.1  | 49.2  | 42.2  | 28.8  | 19.7 | 8.84 | 5.60 | 3.24 | 1.64 |

## Constant power discharge ratings-watts at 20°C

| F.V/Time | 5MIN | 10MIN | 15MIN | 30MIN | 1HR  | 3HR  | 5HR  | 10HR | 20HR |
|----------|------|-------|-------|-------|------|------|------|------|------|
| 1.60V    | 190  | 131   | 102   | 65.3  | 40.3 | 17.3 | 11.1 | 7.00 | 3.65 |
| 1.67V    | 181  | 130   | 101   | 64.0  | 39.0 | 17.3 | 11.1 | 6.89 | 3.64 |
| 1.70V    | 169  | 126   | 100   | 62.4  | 38.0 | 17.3 | 11.1 | 6.84 | 3.64 |
| 1.75V    | 157  | 118   | 93.7  | 60.7  | 37.6 | 17.0 | 11.0 | 6.72 | 3.62 |
| 1.80V    | 141  | 110   | 88.1  | 59.1  | 37.0 | 16.8 | 10.8 | 6.61 | 3.49 |
| 1.85V    | 113  | 91.1  | 76.9  | 54.1  | 36.6 | 16.7 | 10.6 | 6.49 | 3.29 |

