



Solar Series

BSB Solar Series Valve-regulated Lead Acid batteries use particular alloy and material technology design to ensure a excellent performance in various environments, especially high and low temp. BSB Solar series batteries is optimal for storage and conversion of photovoltaic energy and wind energy.

Application

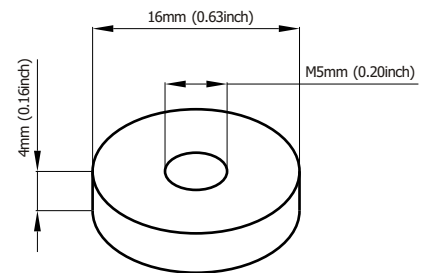
- Photovoltaic system
- Alternative Energy System
- Electric Utility
- Outdoor control Equipment
- Railroad Utility

General Features

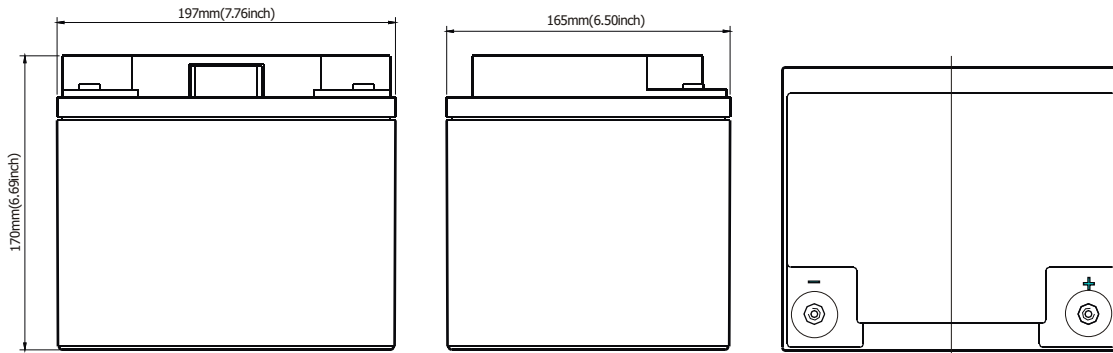
- Sealed and maintenance free operation.
- Non-Spillable construction design.
- ABS containers and covers(UL94HB, UL94V-0) optional.
- Safety valve installation for explosion proof.
- High quality and high reliability.
- Exceptional deep discharge recovery performance.
- Low self discharge characteristic.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

Construction

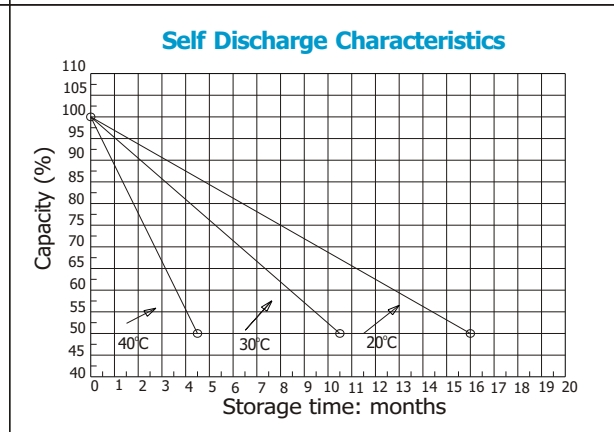
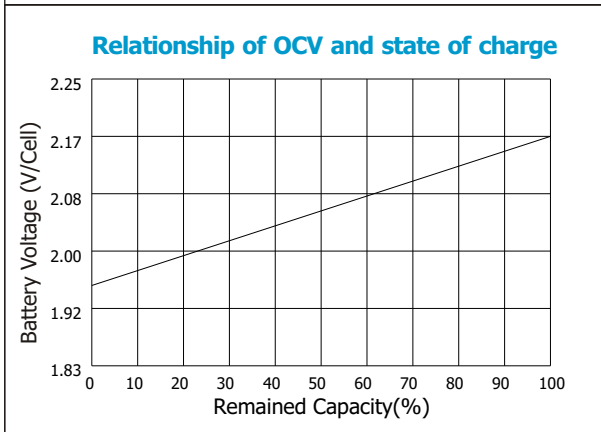
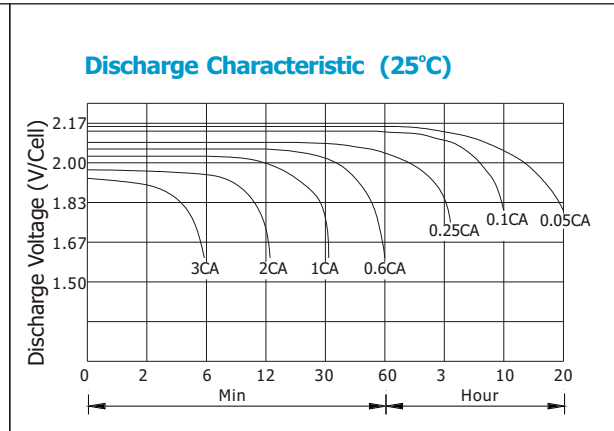
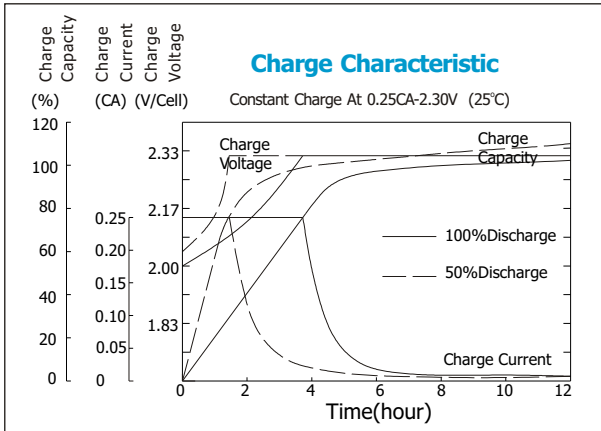
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|-----------------|--------------|--------------------|---------------|
| Component | Raw material | Sealant | Epoxy Resin |
| Positive | Lead dioxide | Safety valve | EPDR |
| Negative | Lead | Terminal | Copper |
| Container | ABS | Separator | AGM |
| Cover | ABS | Electrolyte | sulfuric acid |



Terminal Dimensions



| | | | | |
|----------------------------------|---|------------------|-----------------------|------------------|
| Battery Model | Solar 12-38 | | | |
| Designed Floating Life | 8 Years | | | |
| Capacity(25°C) | 20HR(1.95A,1.75V) | 10HR(3.8A,1.75V) | 5HR(6.46A,1.75V) | 1HR(22.8A,1.75V) |
| | 39AH | 38AH | 32.3AH | 22.8AH |
| Dimensions | Length | Width | Height | Total Height |
| | 197mm(7.76inch) | 165mm(6.50inch) | 170mm(6.69inch) | 170mm(6.69inch) |
| Approx. Weight | 14 Kg (30.87 lbs) | | | |
| Internal Resistance | Full charged at 25°C: 0.0095 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: 9.5A | | 13.6-13.8V(-20mV/ °C) | |



Constant current discharge ratings-amperes at 25°C

| F. V/Time | 5MIN | 10MIN | 15MIN | 30MIN | 1HR | 3HR | 5HR | 10HR | 20HR |
|-----------|------|-------|-------|-------|------|------|------|------|------|
| 1.60V | 133 | 91.2 | 66.5 | 39.9 | 25.1 | 10.4 | 7.25 | 4.03 | 2.00 |
| 1.67V | 120 | 83.2 | 64.6 | 38.8 | 25.0 | 10.3 | 7.19 | 3.97 | 2.00 |
| 1.70V | 114 | 80.2 | 62.3 | 38.0 | 25.0 | 10.3 | 7.19 | 3.94 | 2.00 |
| 1.75V | 101 | 74.1 | 58.9 | 37.2 | 24.7 | 10.3 | 7.13 | 3.87 | 1.99 |
| 1.80V | 91.2 | 68.8 | 56.2 | 36.1 | 24.4 | 10.2 | 7.07 | 3.80 | 1.92 |
| 1.85V | 69.2 | 56.6 | 48.6 | 33.2 | 24.1 | 10.2 | 7.02 | 3.74 | 1.80 |

Constant power discharge ratings-watts at 25°C

| F. V/Time | 5MIN | 10MIN | 15MIN | 30MIN | 1HR | 3HR | 5HR | 10HR | 20HR |
|-----------|------|-------|-------|-------|------|------|------|------|------|
| 1.60V | 219 | 151 | 118 | 75.2 | 49.4 | 19.9 | 13.9 | 8.06 | 4.01 |
| 1.67V | 208 | 149 | 117 | 73.7 | 47.8 | 19.9 | 13.9 | 7.94 | 3.99 |
| 1.70V | 194 | 146 | 115 | 71.8 | 46.5 | 19.9 | 13.9 | 7.88 | 3.99 |
| 1.75V | 181 | 136 | 108 | 69.9 | 46.1 | 19.6 | 13.7 | 7.74 | 3.97 |
| 1.80V | 162 | 127 | 101 | 68.0 | 45.3 | 19.3 | 13.5 | 7.61 | 3.83 |
| 1.85V | 130 | 105 | 89 | 62.3 | 44.9 | 19.3 | 13.3 | 7.47 | 3.60 |

