



## VRLA Rechargeable Battery

# EP12-12



### FEATURES

- Absorbent Glass Mat technology for efficient gas recombination
- Maintenance free(no water topping-up required)
- No free acid(Non-spillable battery)
- Can be used in any orientation(excluding used inverted)
- The battery is designed for heavy duty cyclic application
- Low self-discharge rate, lower than 3% capacity loss per month

### APPLICATION

- UPS
- Electric Vehicle
- Power Packs
- Fishing Lights
- Lawn mower



### SPECIFICATIONS

|                             |                                                                                                                                                                                                                                                                                                               |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Nominal Voltage             | 12 V                                                                                                                                                                                                                                                                                                          |
| Nominal Capacity            | 12Ah @ 20 hour rate F.V.(1.75V/cell)                                                                                                                                                                                                                                                                          |
| Approx. Weight              | 4200g(9.26lbs.)                                                                                                                                                                                                                                                                                               |
| Terminals                   | T2 (Faston Tab 250) T1 is optional                                                                                                                                                                                                                                                                            |
| Internal Resistance         | $\leq 16\text{m}\Omega$ (Fully Charged )                                                                                                                                                                                                                                                                      |
| Max. Discharge Current      | 180 A (5 sec.)                                                                                                                                                                                                                                                                                                |
| Max. Charge Current         | 3.6 A                                                                                                                                                                                                                                                                                                         |
| Operating Temperature Range | Charge : $0^{\circ}\text{C}\sim 40^{\circ}\text{C}(32^{\circ}\text{F}\sim 104^{\circ}\text{F})$<br>Discharge : $-20^{\circ}\text{C}\sim 50^{\circ}\text{C}(-4^{\circ}\text{F}\sim 122^{\circ}\text{F})$<br>Storage : $-20^{\circ}\text{C}\sim 40^{\circ}\text{C}(-4^{\circ}\text{F}\sim 104^{\circ}\text{F})$ |
| Container Material          | Standard: ABS( UL 94-HB) EP12-12<br>Optional: Flame Retardant ABS(UL 94-V0) EP12-12FR                                                                                                                                                                                                                         |



- IEC 61056-1
- JIS C 8702-1
- GB/T 19639.1

| DIMENSION(mm/inch)                                                                                                                                                       | OUTER DIMENSIONS | TERMINAL TYPE                                                                           |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|-----------------------------------------------------------------------------------------|
| <b>Length</b><br>151±1.5 (5.94±0.06)<br><b>Width</b><br>98±1.5 (3.86±0.06)<br><b>Container Height</b><br>94±1.5 (3.70±0.06)<br><b>Total Height</b><br>98±2.0 (3.86±0.08) |                  | <div>             ● Terminal T1<br/> </div> <div>             ● Terminal T2<br/> </div> |

### Constant power discharge characteristics at 25 °C/77 °F Unit: W

| F.V.<br>(V/cell) | Discharge Time | 5 Min | 10 Min | 15 Min | 30 Min | 1 Hr | 3 Hr | 5 Hr  | 10 Hr | 20 Hr |
|------------------|----------------|-------|--------|--------|--------|------|------|-------|-------|-------|
| 1.80V            |                | 391.0 | 293.8  | 238.1  | 143.2  | 83.0 | 35.0 | 24.10 | 13.48 | 7.05  |
| 1.75V            |                | 452.0 | 318.3  | 249.0  | 148.6  | 85.5 | 35.7 | 24.50 | 13.68 | 7.20  |
| 1.70V            |                | 480.0 | 329.8  | 256.7  | 152.0  | 87.0 | 36.0 | 24.60 | 13.75 | 7.23  |
| 1.65V            |                | 502.0 | 337.7  | 262.6  | 154.2  | 88.0 | 36.3 | 24.70 | 13.80 | 7.25  |
| 1.60V            |                | 518.0 | 344.4  | 267.8  | 155.7  | 88.9 | 36.5 | 24.80 | 13.80 | 7.25  |

### Constant current discharge characteristics at 25 °C/77 °F Unit: A

| F.V.<br>(V/cell) | Discharge Time | 5 Min | 10 Min | 15 Min | 30 Min | 1 Hr | 3 Hr | 5 Hr  | 10 Hr | 20 Hr |
|------------------|----------------|-------|--------|--------|--------|------|------|-------|-------|-------|
| 1.80V            |                | 35.23 | 25.86  | 20.70  | 12.14  | 6.97 | 2.92 | 2.008 | 1.123 | 0.588 |
| 1.75V            |                | 41.47 | 28.02  | 21.65  | 12.59  | 7.18 | 2.98 | 2.042 | 1.140 | 0.600 |
| 1.70V            |                | 44.04 | 29.03  | 22.32  | 12.88  | 7.31 | 3.00 | 2.050 | 1.146 | 0.603 |
| 1.65V            |                | 46.06 | 29.73  | 22.83  | 13.07  | 7.39 | 3.03 | 2.058 | 1.150 | 0.604 |
| 1.60V            |                | 47.52 | 30.32  | 23.29  | 13.19  | 7.47 | 3.04 | 2.067 | 1.150 | 0.604 |

All data and artworks shall be changed without prior notice, BB reserves the right to explain and update the information contained hereinto.