

# BG-121000NB

(12V 100Ah)

Rechargeable Sealed Lead Acid Battery

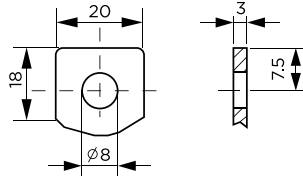


Technical Specification Sheet

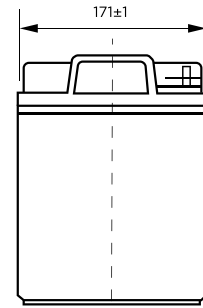
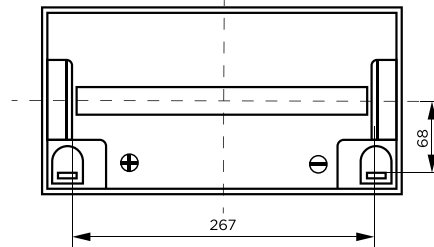
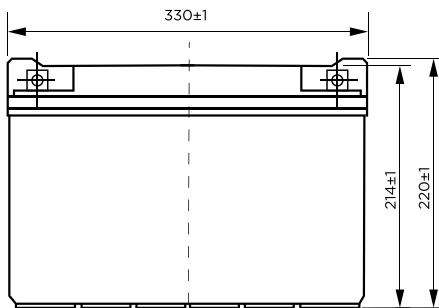


These rechargeable batteries are lead-lead dioxide systems. The dilute sulfuric acid electrolyte is absorbed by separators and thus immobilized. Should the battery be accidentally overcharged producing hydrogen and oxygen, special one-way valves allow the gases to escape thus avoiding excessive pressure build-up. Otherwise, the battery is completely sealed and is, therefore, maintenance-free, leak proof and usable in any position.

Terminal (F5)



Unit: mm



## Performance Characteristics

|  |   |                   |                     |                     |                       |
|--|---|-------------------|---------------------|---------------------|-----------------------|
| <b>Nominal Voltage</b>                     | 12V   |                   |                     |                     |                       |
| <b>Number of cells</b>                     | 6   |                   |                     |                     |                       |
| <b>Nominal Capacity</b><br>77°F (25°C)     | 20HR(5A,10.8V)                              |                   | 1HR(65A,9.6V)       |                     |                       |
|  | 100AH                                       |                   | 65AH                |                     |                       |
| <b>Dimensions</b>                          | <i>Length</i>                               | <i>Width</i>      | <i>Height</i>       | <i>Total Height</i> | <i>Approx. Weight</i> |
|  | 330mm<br>13.0inch                           | 171mm<br>6.74inch | 214mm<br>8.43inch   | 220mm<br>8.66inch   | 28.2Kg<br>62.2lbs     |
| <b>Internal Resistance</b>                 | Full charged battery 77°F (25°C) : 5mΩ      |                   |                     |                     |                       |
| <b>Self Discharge</b>                      | 3% of capacity declined per month at 20°C   |                   |                     |                     |                       |
| <b>Operating Temperature Range</b>         | Discharge -20<br>-60°C                      |                   | Charge -10<br>-60°C |                     | Storage -20<br>-60°C  |
|  |   |                   |                     |                     |                       |
| <b>Max.Discharge Current</b><br>77°F(25°C) | 900A (5S)                                   |                   |                     |                     |                       |
| <b>Short Circuit Current</b>               | 2100A                                       |                   |                     |                     |                       |
| <b>Charge Methods</b>                      | Constant Voltage Charge 77°F(25°C)          |                   |                     |                     |                       |
|  | Cycle use                                   |                   | Standby use         |                     |                       |
|  | 14.4-14.7V<br>Maximum charging current: 25A |                   | 13.6-13.8V          |                     |                       |

## General Features

- Absorbent Glass Mat(AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance or water adding.
- Not restricted for air transport-complies with IATA/ICAO Special Provision A67.
- UL-recognized component.
- Can be mounted in any orientation.
- Computer designed lead, calcium tin alloy grid for high power density.
- Long service life, float or cyclic applications.
- Maintenance-free operation.
- Low self discharge.

## Battery 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 |



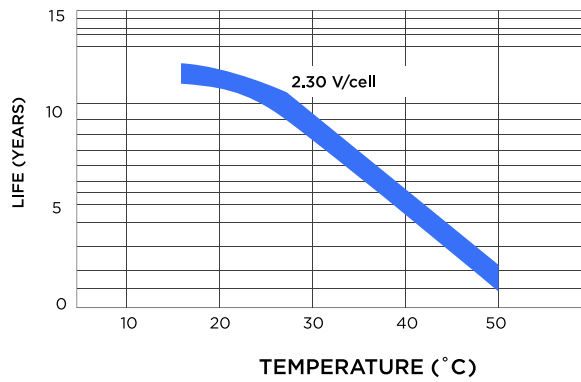
**Constant current discharge ratings-amperes at 77°F 25°C**

| End Voltage Per cell/V | 10 min | 15 min | 30 min | 1HR  | 3HR  | 5HR  | 10HR | 20HR |
|------------------------|--------|--------|--------|------|------|------|------|------|
| 1.60V                  | 231.0  | 190.0  | 112.0  | 65.0 | 27.5 | 18.3 | 10.2 | 5.25 |
| 1.65V                  | 220.0  | 182.0  | 108.0  | 62.8 | 26.5 | 17.8 | 10.1 | 5.20 |
| 1.70V                  | 208.0  | 173.0  | 103.5  | 60.5 | 25.5 | 17.2 | 10.0 | 5.15 |
| 1.75V                  | 196.0  | 164.0  | 98.7   | 58.2 | 24.4 | 16.6 | 9.8  | 5.10 |
| 1.80V                  | 183.0  | 154.0  | 93.7   | 55.7 | 23.2 | 15.9 | 9.5  | 5.00 |

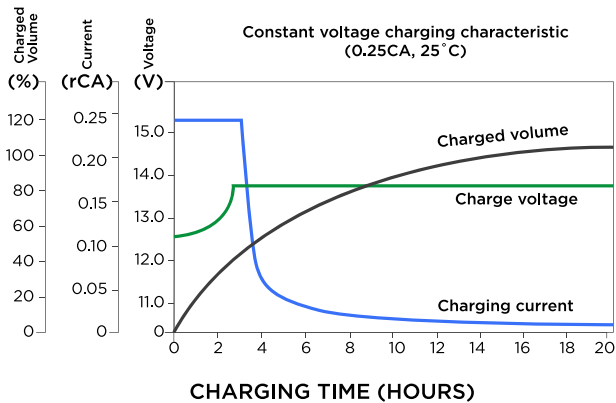
**Constant power discharge ratings-watts at 77°F 25°C**

| End Voltage Per cell/V | 10 min | 15 min | 30 min | 1HR   | 3HR  | 5HR  | 10HR | 12HR |
|------------------------|--------|--------|--------|-------|------|------|------|------|
| 1.60V                  | 395.0  | 315.0  | 200.0  | 124.0 | 52.0 | 37.0 | 20.8 | 17.0 |
| 1.65V                  | 379.0  | 305.0  | 193.0  | 121.0 | 51.0 | 36.4 | 20.6 | 16.9 |
| 1.70V                  | 362.0  | 293.0  | 185.0  | 118.0 | 49.8 | 35.7 | 20.4 | 16.8 |
| 1.75V                  | 344.0  | 281.0  | 177.0  | 114.0 | 48.5 | 35.0 | 20.2 | 16.6 |
| 1.80V                  | 324.0  | 267.0  | 168.0  | 109.0 | 47.0 | 34.1 | 19.9 | 16.4 |

**Temperature effects on float life**



**Charge characteristic curve**



**Cycle service life in relation to depth of discharge**

