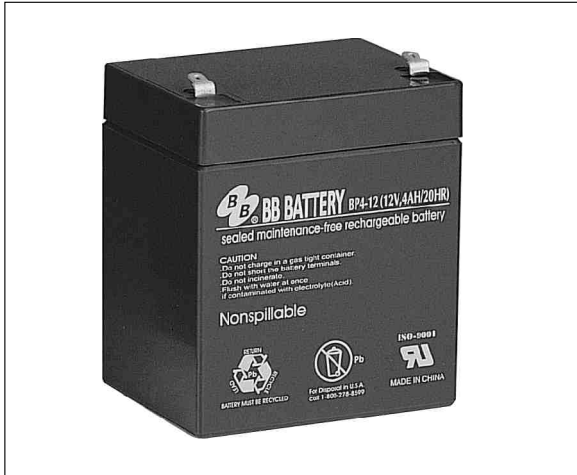




Maintenance-Free Rechargeable Sealed Lead-Acid Battery

BP4-12

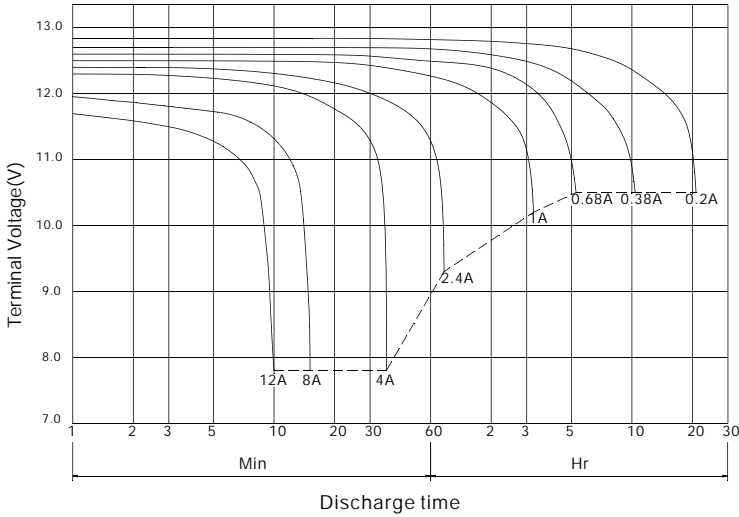


The battery is constructed by plates, separators, safety valves and container. Since the electrolyte is held by a glass-mat separator and plates, the battery can use in any direction and position without leakage.

PERFORMANCE SPECIFICATIONS

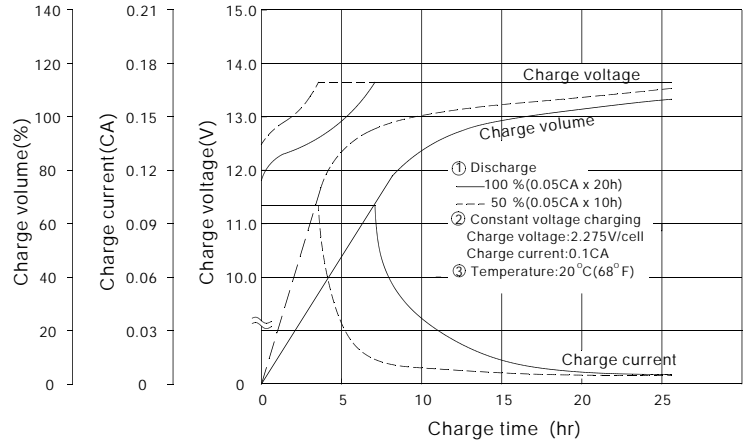
| | |
|---|--|
| Nominal Voltage(V)..... | 12 volts(6cells in series) |
| Nominal Capacity(AH) | |
| 20 hour rate F.V.(1.75V/cell) (200mA to 10.50volts) | 4.0A.H. |
| 10 hour rate F.V.(1.75V/cell) (380mA to 10.50volts) | 3.8A.H. |
| 5 hour rate F.V.(1.75V/cell) (680mA to 10.50volts) | 3.4A.H. |
| 1 hour rate F.V.(1.55V/cell) (2400mA to 9.30volts)..... | 2.4A.H. |
| Approximate Weight..... | 1670g(3.68lbs.) |
| Terminal | |
| Standard..... | Type T1 |
| Optional..... | Type T2 |
| Internal Resistance (Fully Charged Battery)..... | <45mΩ |
| Maximum Discharge Current For 5 sec.(A)..... | 60A |
| Maximum Charge Current(A)..... | 1.2A |
| Ambient Temperature | |
| Charge..... | 0°C(32°F)~40°C(104°F) |
| Discharge..... | -20°C(-4°F)~50°C(122°F) |
| Storage..... | -20°C(-4°F)~40°C(104°F) |
| Vibration test: | |
| Frequency: 16.7HZ | |
| Amplitude: 4mm | |
| Vibrate the battery horizontally or vertically for 60 minutes. The battery have no abnormality. | |
| Case..... | ABS |
| Dimension(mm/inch) | |
| Length ±1.5mm..... | 90/3.54 |
| Width ±1.5mm..... | 70/2.76 |
| Container Height ±1.5mm..... | 102/4.02 |
| Total Height ±2mm..... | 106/4.17 |
| Application..... | Electronic Doorbells, Toy-Cars, Fans, UPS. |

BP4-12 Battery discharge characteristics (25°C/77°F)



BATTERY CHARGING CHARACTERISTICS

(Typical example of the charge characteristics for the standby use)

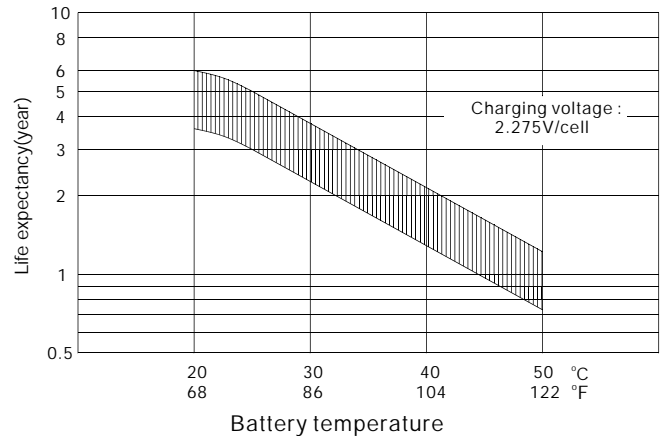


Charging Procedure

| Application | Charging method | Charging Voltage at 20°C (V/cell) | Temperature compensation coefficient of charging voltage (mV/°C/cell) | Max. charging current (CA) | Charging time 0.1CA, 20°C (h) | | Temp (°C) |
|--------------------------|---|-----------------------------------|---|----------------------------|-------------------------------|---------------|--------------------|
| | | | | | 100% discharge | 50% discharge | |
| For standby power Source | Constant voltage & Constant current charging (with current restriction) | 2.25~2.30 | -3 | 0.3 | 24 | 20 | 0~40 (32~104°F) |
| For cycle service | | 2.40~2.50 | -4 | 0.3 | 16 | 10 | |

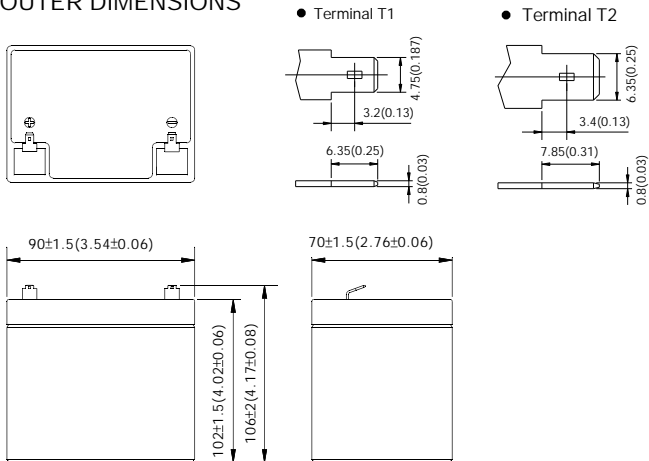
*Temperature compensation of charging voltage is not needed, when using the batteries within 5°C to 35°C range.

Effect of Temperature on Long Term Float Life



TERMINAL TYPE mm(inch)

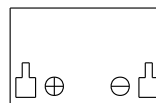
OUTER DIMENSIONS



Constant power discharge characteristics at 25°C/77°F

| Final Voltage | Discharge time | | | | | | | | | |
|---------------|----------------|-------|-------|-------|-------|-------|------|------|------|--|
| | 5Min | 10Min | 15Min | 30Min | 1Hr | 3Hr | 5Hr | 10Hr | 20Hr | |
| 10.80V | 144.6 | 106.5 | 85.3 | 50.8 | 29.11 | 11.66 | 8.04 | 4.49 | 2.35 | |
| 10.50V | 167.4 | 115.3 | 89.2 | 52.7 | 29.99 | 11.89 | 8.16 | 4.56 | 2.40 | |
| 10.20V | 177.9 | 119.5 | 92.0 | 53.9 | 30.52 | 12.00 | 8.20 | 4.58 | 2.41 | |
| 9.90V | 185.8 | 122.4 | 94.1 | 54.7 | 30.89 | 12.08 | 8.23 | 4.60 | 2.42 | |
| 9.60V | 192.0 | 124.8 | 96.0 | 55.2 | 31.20 | 12.16 | 8.26 | 4.60 | 2.42 | |

TERMINAL POSITION



B.B. BATTERY CO., LTD. Web Site: <http://www.bb-battery.com>

USA :

B&B BATTERY (USA) INC.
6415 RANDOLPH ST. COMMERCE,
CA, 90040 U.S.A.
TEL: 1-323-278-1900 1-800-278-8599
FAX: 1-323-278-1268

CHINA FACTORY:

CHENG DONG TRIAL AREA, HUANG GANG,
RAOPING GUANG DONG, CHINA, 515700
TEL: 86-768-7601001-2
FAX: 86-768-7601469

UK:

B & B BATTERY (UK) CO., LTD.
TEL: 44-161-339-9458
FAX: 44-161-343-7030

HONG KONG:

NATIONAL TRADING LTD.
TEL: 852-2301-3800
FAX: 852-2739-1182

JAPAN:

B & B BATTERY(JAPAN) CO., LTD.
TEL: 81-426-256-537
FAX: 81-426-256-537

TAIWAN:

B & B BATTERY CO., LTD.
TEL: 886-6-5898081-3
FAX: 886-6-5898087



MH19884

