

Maintenance-Free Rechargeable Sealed Lead-Acid Battery

# EVP7-12

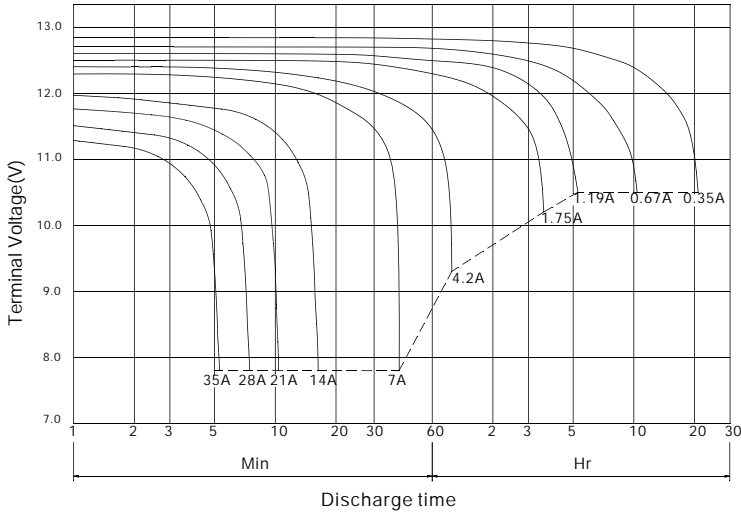


The battery is constructed by plates, separators, safety valves and container. Since the electrolyte is held by a glass-mat separator and plates, the battery can use in any direction and position without leakage.

## PERFORMANCE SPECIFICATIONS

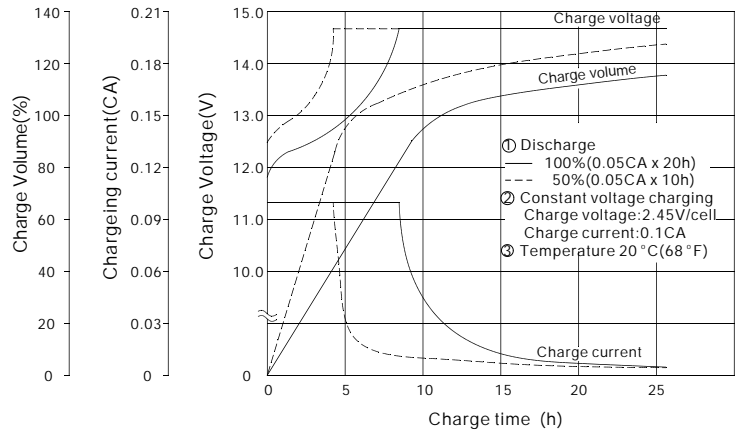
|   |  |
|---|--|
| Nominal Voltage(V).....   | 12 volts(6cells in series)                                   |
| Nominal Capacity(AH)  |  |
| 20 Hour rate F.V.(1.75V/cell) (0.35A to 10.50volts) .....                                       | 7.00A.H.   |
| 5 Hour rate F.V.(1.75V/cell) (1.19A to 10.50volts) .....  | 5.95A.H.   |
| 30 Min rate F.V.(1.30V/cell) (8.75A to 7.80volts) .....   | 4.37A.H.   |
| Approximate Weight .....  | 2750g(6.06lbs.)  |
| Terminal  |  |
| Standard.....   | Type T2  |
| Optional.....   | Type T1  |
| Internal Resistance (Fully Charged Battery).....  | <15mΩ  |
| Maximum Discharge Current For 5 sec.(A).....  | 105A   |
| Maximum Charge Current(A).....  | 2.1A   |
| 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.....  | 151/5.94   |
| Width           ±1.5mm.....   | 65/2.56  |
| Container Height ±1.5mm.....  | 94/3.70  |
| Total Height   ±2mm.....  | 100/3.94   |
| Application.....  | Laboratory Equipment, Toy-Cars, Power Packs, Fishing Lights. |

## EVP7-12 Battery discharge characteristics (25 °C/77 °F)



## BATTERY CHARGING CHARACTERISTICS

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



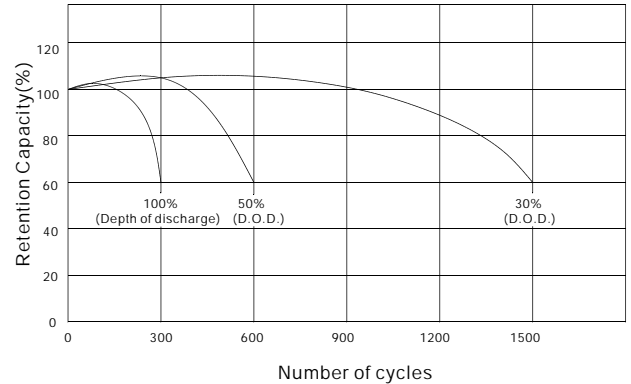
### Charging Procedure

| 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            |                 |

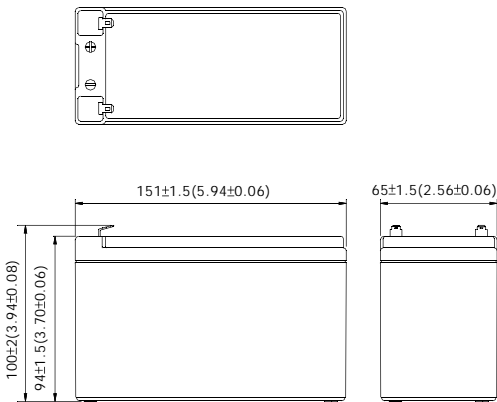
\*Temperature compensation of charging voltage is not needed, when using the batteries within 5 °C to 35 °C range.

### Battery Life Characteristics of Cyclic Use

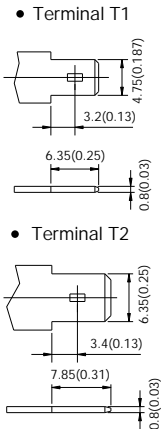
Testing Conditions : Discharge Current : 1C Amp (F.V. 1.60v/cell)  
 Charging Current : 0.1C Amp  
 Charging Voltage : 120% OF Discharge Capacity  
 Ambient Temperature : 20 °C (68 °F)



### OUTER DIMENSIONS



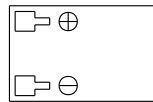
### TERMINAL TYPE mm (inch)



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

| Final Voltage | Discharge time |       |       |       |       |      |      |      |      |
|---------------|----------------|-------|-------|-------|-------|------|------|------|------|
|               | 5Min           | 10Min | 15Min | 30Min | 45Min | 1Hr  | 3Hr  | 5Hr  | 10Hr |
| 10.80V        | 301            | 213   | 161   | 95    | 68    | 54.8 | 22.0 | 14.0 | 7.8  |
| 10.50V        | 348            | 231   | 169   | 99    | 71    | 56.6 | 22.6 | 14.3 | 8.0  |
| 10.20V        | 370            | 240   | 174   | 102   | 72    | 57.8 | 23.0 | 14.4 | 8.0  |
| 9.90V         | 386            | 245   | 178   | 104   | 73    | 58.4 | 23.2 | 14.5 | 8.1  |
| 9.60V         | 399            | 250   | 181   | 105   | 74    | 58.8 | 23.3 | 14.5 | 8.1  |

### TERMINAL POSITION



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

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 FAX: 1-323-278-1268

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 FAX: 44-161-343-7030

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