



## VRLA Rechargeable Battery

# BPS5-12 (BPS5-12FR)

### FEATURES

- Maintenance free(no water topping-up required)
- No free acid(Non-spillable battery)
- Can be used in any orientation(excluding used inverted)
- Absorbent Glass Mat technology for efficient gas recombination

### APPLICATION

- UPS
- Fans
- Toy-Cars
- Electronic Doorbells

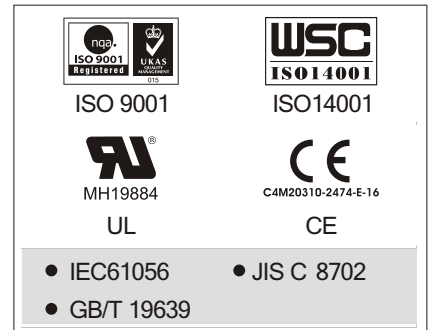


### SPECIFICATIONS

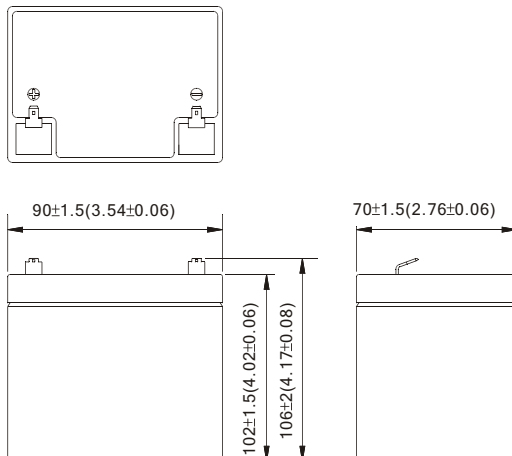
|                             |                                    |                        |
|-----------------------------|------------------------------------|------------------------|
| Nominal Voltage             | 12V                                |                        |
| Nominal Capacity            | 20 Hour Rate (250mA, 10.5V)        | 5.00 Ah                |
|                             | 10 Hour Rate (475mA, 10.5V)        | 4.75 Ah                |
|                             | 5 Hour Rate (850mA, 10.5V)         | 4.25 Ah                |
|                             | 1 Hour Rate (3000mA, 9.3V)         | 3.00 Ah                |
| Approx. Weight              | 1800g(3.97lbs.)                    |                        |
| Terminals                   | T1 (Faston Tab 187) T2 is optional |                        |
| Max. Discharge Current      | 75 A (5 sec.)                      |                        |
| Max. Charge Current         | 1.5 A                              |                        |
| Operating Temperature Range | Charge                             | 0°C~40°C(32°F~104°F)   |
|                             | Discharge                          | -20°C~50°C(-4°F~122°F) |
|                             | Storage                            | -20°C~40°C(-4°F~104°F) |
| Self Discharge              | < 3% per month (25°C)              |                        |
| Internal Resistance         | ≤27mΩ (Fully Charged )             |                        |

### CONTAINER MATERIAL

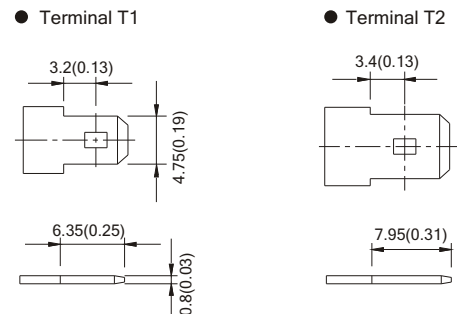
- BPS5-12:  
ABS: UL 94-HB (Dark gray color)
- BPS5-12FR:  
ABS: UL 94-V0 (Light gray color)



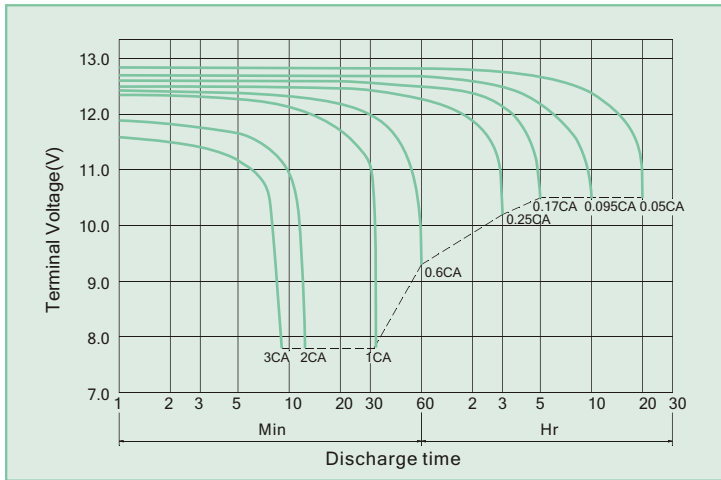
| OUTER DIMENSIONS mm(inch) | Length (L)        | Width (W)         | Container Height (H) | Total Height (TH)  |
|---------------------------|-------------------|-------------------|----------------------|--------------------|
|                           | 90±1.5(3.54±0.06) | 70±1.5(2.76±0.06) | 102±1.5(4.02±0.06)   | 106±2.0(4.17±0.08) |



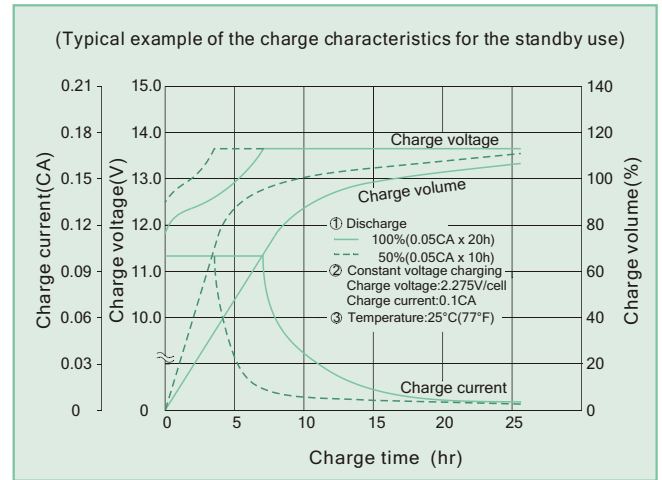
### TERMINAL TYPE



**BPS5-12 (BPS5-12FR) discharge characteristics (25°C /77°F)**



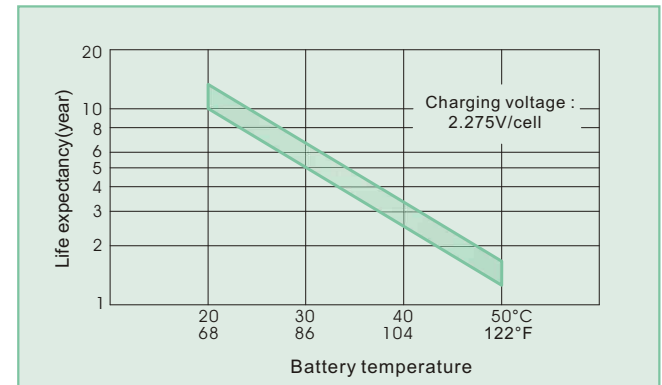
**Battery Charging Characteristics**



**Charging Procedure**

| Application              | Charging method   | Charging Voltage at 25°C (V/cell) | Temperature compensation coefficient of charging voltage (mV/°C /cell) | Max. charging current (CA) | Charging time 0.1CA, 25°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            |                 |

**Effect Of Temperature On Long Term Float Life**



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

| F.V. (V/cell) \ Discharge Time | 5 Min | 10 Min | 15 Min | 30 Min | 1 Hr  | 3 Hr  | 5 Hr  | 10 Hr | 20 Hr |
|--------------------------------|-------|--------|--------|--------|-------|-------|-------|-------|-------|
| 1.80V                          | 180.8 | 133.1  | 106.6  | 63.5   | 36.39 | 14.57 | 10.05 | 5.62  | 2.96  |
| 1.75V                          | 209.2 | 144.2  | 111.5  | 65.9   | 37.48 | 14.87 | 10.20 | 5.70  | 3.00  |
| 1.70V                          | 222.3 | 149.4  | 115.0  | 67.4   | 38.16 | 15.00 | 10.26 | 5.73  | 3.01  |
| 1.65V                          | 232.3 | 152.9  | 117.6  | 68.3   | 38.61 | 15.10 | 10.29 | 5.75  | 3.02  |
| 1.60V                          | 240.0 | 156.0  | 120.0  | 69.0   | 39.00 | 15.20 | 10.32 | 5.75  | 3.02  |

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

| F.V. (V/cell) \ Discharge Time | 5 Min | 10 Min | 15 Min | 30 Min | 1 Hr | 3 Hr | 5 Hr  | 10 Hr | 20 Hr |
|--------------------------------|-------|--------|--------|--------|------|------|-------|-------|-------|
| 1.80V                          | 16.3  | 11.71  | 9.27   | 5.38   | 3.06 | 1.21 | 0.837 | 0.468 | 0.246 |
| 1.75V                          | 19.2  | 12.69  | 9.70   | 5.58   | 3.15 | 1.24 | 0.850 | 0.475 | 0.250 |
| 1.70V                          | 20.4  | 13.15  | 10.00  | 5.71   | 3.21 | 1.25 | 0.855 | 0.477 | 0.251 |
| 1.65V                          | 21.3  | 13.46  | 10.23  | 5.79   | 3.24 | 1.26 | 0.858 | 0.479 | 0.252 |
| 1.60V                          | 22.0  | 13.73  | 10.43  | 5.85   | 3.28 | 1.27 | 0.860 | 0.479 | 0.252 |

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

SC(M-Sader-Jap) A/0 REV. Feb. 2010

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