# PBC SERIES -Deep Cycle AGM

## PBC12-120 (12V120Ah)

## Specification

| | | |
|---|---|---|
| Nominal Voltage | 12V | |
| Nominal Capacity(10HR) | 120.0Ah | |
| Dimension | Length | 408 ± 3mm |
| | Width | 177 ± 2mm |
| | Container Height | 225 ± 3mm |
| | Total Height (with Terminal) | 225 ± 3mm |
| Approx Weight | Approx 36.0 Kg | |
| Terminal | T11 | |
| Container Material | ABS | |
| Rated Capacity | 128.0 Ah/6.4A | (20hr,1.80V/cell,25°C) |
| | 120.0 Ah/12.0A | (10hr,1.80V/cell,25°C) |
| | 96.0 Ah/19.2A | (5hr,1.75V/cell,25°C) |
| | 90.0 Ah/30.0A | (3hr,1.75V/cell,25°C) |
| | 73.2 Ah/73.2A | (1hr,1.60V/cell,25°C) |
| Max. Discharge Current | 1300A (5s) | |
| Internal Resistance | Approx 4.0mΩ | |
| Operating Temp.Range | Discharge : -15 ~ 50°C<br>Charge : 0 ~ 40°C<br>Storage : -15 ~ 40°C | |
| Nominal Operating Temp. | 25±3° C | |
| Range Cycle Use | Initial Charging Current less than 36.0A.Voltage<br>14.4V~15.0V at 25°C Temp. Coefficient -30mV/°C | |
| Standby Use | No limit on Initial Charging Current Voltage<br>13.5V~13.8V at 25°C Temp. Coefficient -20mV/°C | |
| Capacity affected by Temperature | 40° C | 103% |
| | 25°C | 100% |
| | 0° C | 86% |
| Self Discharge | PBC series batteries may be stored for up to 6 months at 25° C and then a freshening charge is required.<br>For higher temperatures the time interval will be shorter. | |

## Applications

- *All purpose*
- *Uninterruptable Power Supply (UPS)*
- *Electric Power System (EPS)*
- *Emergency backup power supply*
- *Emergency light*
- *Railway signal*
- *Aircraft signal*
- *Alarm and security system Electronic*
- *apparatus and equipment*
- *Communication power supply*
- *DC power supply*
- *Auto control system*

Intertek

CEC ISO14001 ISO9001 CE

## Constant Current Discharge (Amperes) at 25 °C (77°F )

| F.V/Time | 20min | 30min | 45min | 1h | 2h | 3h | 4h | 5h | 6h | 8h | 10h | 20h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.85V/cell | 114..0 | 91..2 | 69.6 | 56.4 | 36.0 | 27.6 | 22.8 | 18.0 | 15.6 | 13.2 | 11.4 | 6.2 |
| 1.80V/cell | 135.6 | 106.8 | 75.6 | 63.6 | 38.4 | 28.8 | 24.0 | 18.6 | 16.8 | 14.9 | 12.0 | 6.4 |
| 1.75V/cell | 146.4 | 111.6 | 80.4 | 66.0 | 39.6 | 30.0 | 25.2 | 19.2 | 17.4 | 15.6 | 12.4 | 6.7 |
| 1.70V/cell | 153.6 | 116.4 | 85.2 | 68.4 | 40.8 | 31.2 | 26.2 | 20.4 | 18.0 | 17.4 | 12.8 | 6.9 |
| 1.65V/cell | 162.0 | 120.0 | 88.8 | 70.8 | 43.2 | 32.4 | 27.0 | 21.6 | 18.6 | 18.0 | 13.3 | 7.2 |
| 1.60V/cell | 168.0 | 126.0 | 92.4 | 73.2 | 45.6 | 33.6 | 28.2 | 22.8 | 19.8 | 19.2 | 13.8 | 7.4 |

## Constant Power Discharge (Watts/cell) at 25 °C (77°F )

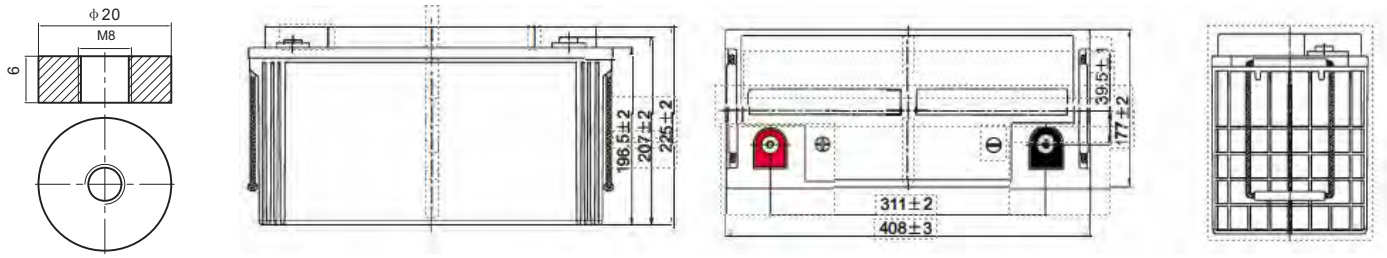
| F.V/Time | 20min | 30min | 45min | 1h | 2h | 3h | 4h | 5h | 6h | 8h | 10h | 20h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.85V/cell | 210.9 | 168.7 | 128.8 | 104.3 | 66.6 | 51.1 | 42.2 | 33.3 | 28.9 | 24.4 | 21.1 | 11.4 |
| 1.80V/cell | 244.1 | 192.2 | 136.1 | 114.5 | 69.1 | 51.8 | 43.2 | 33.5 | 30.2 | 26.8 | 21.6 | 11.6 |
| 1.75V/cell | 256.2 | 195.3 | 140.7 | 115.5 | 69.3 | 52.5 | 44.1 | 33.6 | 30.5 | 27.3 | 21.6 | 11.7 |
| 1.70V/cell | 261.1 | 197.9 | 144.8 | 116.3 | 69.4 | 53.0 | 44.5 | 34.7 | 30.6 | 29.6 | 21.8 | 11.8 |
| 1.65V/cell | 267.3 | 198.0 | 146.5 | 116.8 | 71.3 | 53.5 | 44.6 | 35.6 | 30.7 | 29.7 | 22.0 | 11.9 |
| 1.60V/cell | 268.8 | 201.6 | 147.8 | 117.1 | 73.0 | 53.8 | 45.1 | 36.5 | 31.7 | 30.7 | 22.1 | 11.9 |

Specifications subject to change without notice.

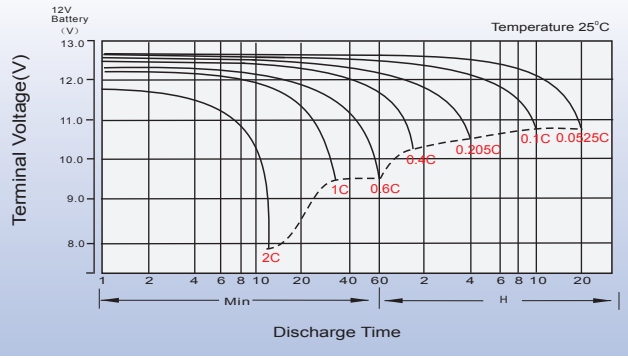
## Dimensions

### T11 Terminal

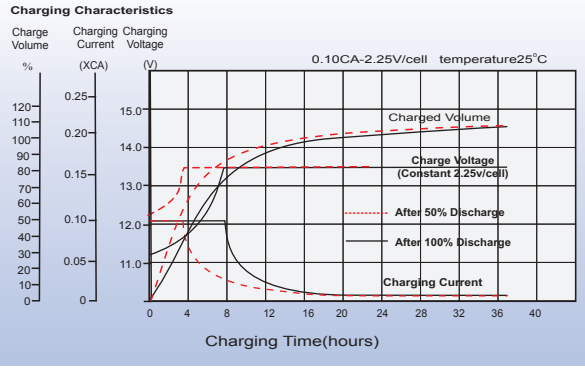
Unit: mm



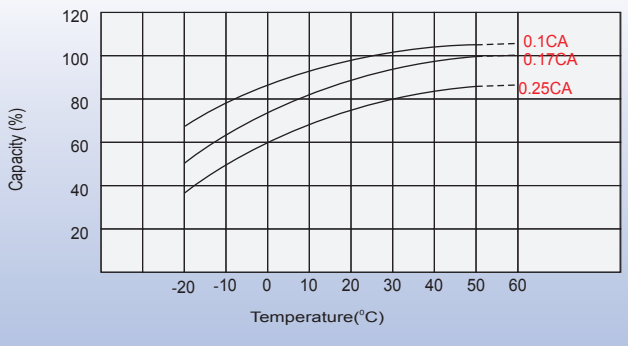

## Discharge Characteristics



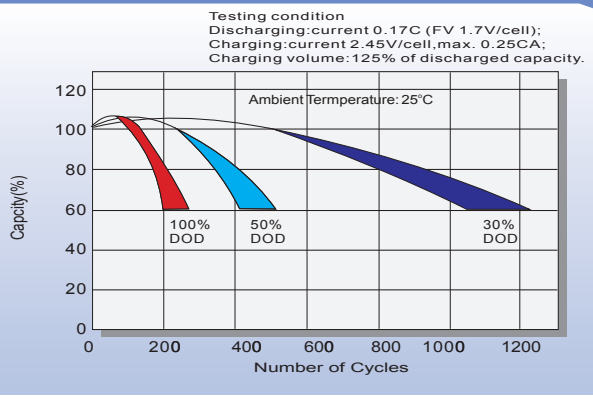

## Charging Characteristics (cycle use)

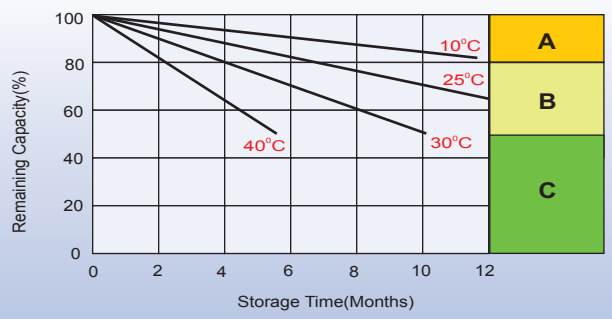



## Temperature Effects in Relation to Battery Capacity




## Cycle Life in Relation to Depth of Discharge




## Self Discharge Characteristics

**A** No supplementary charge required
(Carry out supplementary charge before use if 100% capacity is required.)

**B** Supplementary charge required before use.Optional charging way as below:
1.Charged for above 3 days at limted current 0.25CA and constant volatge 2.25V/cell.
2.Charged for above 20hours at limted current 0.25CA and constant volatge 2.45V/cell.
3.Charged for 8~10hours at limted current 0.05CA .

**C** Supplementary charge may often fail to recover the capacity.
The battery should never be left standing till this is reached.

## Contact

www.premiumbattery.net