

Specification

Nominal Voltage	12V	
Nominal Capacity(20HR)	90.0Ah	
Dimension	Length	259 ± 3mm
	Width	168 ± 2mm
	Container Height	208 ± 3mm
	Total Height (with Terminal)	214 ± 3mm
Approx Weight	Approx 24.4 Kg	
Terminal	T11	
Container Material	ABS	
Rated Capacity	90.0 Ah/4.5A	(20hr, 1.80V/cell, 25°C)
	85.0 Ah/8.5A	(10hr, 1.80V/cell, 25°C)
	68.0 Ah/13.6A	(5hr, 1.75V/cell, 25°C)
	63.9 Ah/21.3A	(3hr, 1.75V/cell, 25°C)
	51.9 Ah/51.9A	(1hr, 1.60V/cell, 25°C)
Max. Discharge Current	960A (5s)	
Internal Resistance	Approx 6mΩ	
Operating Temp. Range	Discharge	-15 ~ 50°C
	Charge	0 ~ 40°C
	Storage	-15 ~ 40°C
Nominal Operating Temp.	25 ± 3° C	
Range Cycle Use	Initial Charging Current less than 24.0A. Voltage	
	14.4V~15.0V at 25°C Temp. Coefficient -30mV/°C	
Standby Use	No limit on Initial Charging Current Voltage	
	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. 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

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	80.8	64.6	49.3	40.0	25.5	19.6	16.2	12.8	11.1	9.4	8.1	4.4
1.80V/cell	96.1	75.7	53.6	45.1	27.2	20.4	17.0	13.2	11.9	10.5	8.5	4.5
1.75V/cell	103.7	79.1	57.0	46.8	28.1	21.3	17.9	13.6	12.3	11.1	8.8	4.7
1.70V/cell	108.8	82.5	60.4	48.5	28.9	22.1	18.5	14.5	12.8	12.3	9.1	4.9
1.65V/cell	114.8	85.0	62.9	50.2	30.6	23.0	19.1	15.3	13.2	12.8	9.4	5.1
1.60V/cell	119.0	89.3	65.5	51.9	32.3	23.8	20.0	16.2	14.0	13.6	9.8	5.3

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

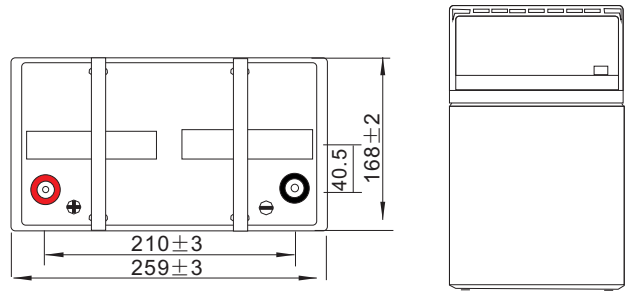
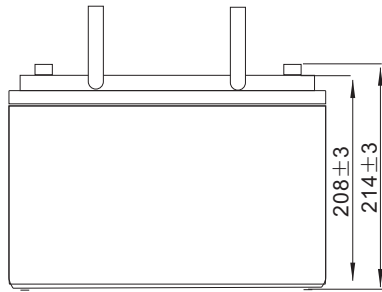
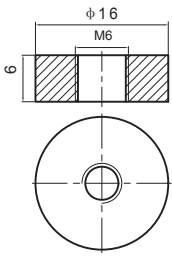
F.V/Time	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	149.4	119.5	91.2	73.9	47.2	36.2	29.9	23.6	20.4	17.3	14.9	8.1
1.80V/cell	172.9	136.2	96.4	81.1	49.0	36.7	30.6	23.7	21.4	19.0	15.3	8.2
1.75V/cell	181.5	138.3	99.7	81.8	49.1	37.2	31.2	23.8	21.6	19.3	15.3	8.3
1.70V/cell	185.0	140.2	102.6	82.4	49.1	37.6	31.5	24.6	21.7	21.0	15.5	8.3
1.65V/cell	189.3	140.3	103.8	82.7	50.5	37.9	31.6	25.2	21.7	21.0	15.6	8.4
1.60V/cell	190.4	142.8	104.7	83.0	51.7	38.1	32.0	25.8	22.4	21.8	15.6	8.4

Specifications subject to change without notice.

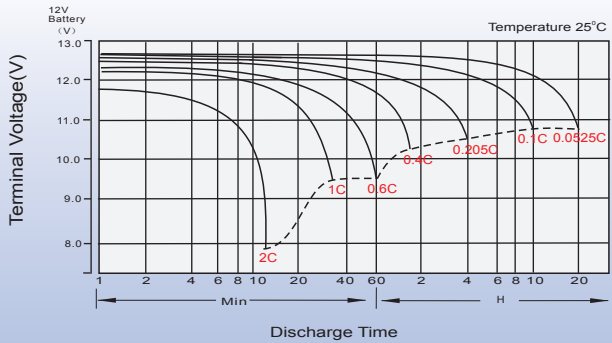
Dimensions

T11 Terminal

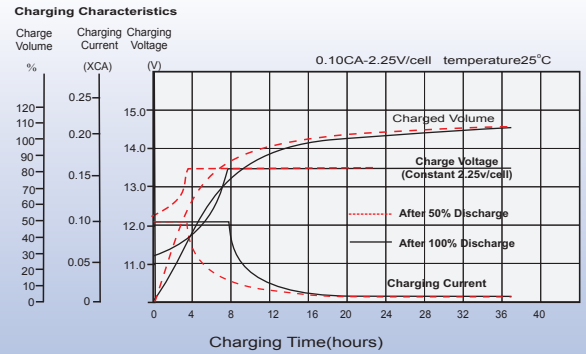
Unit: mm



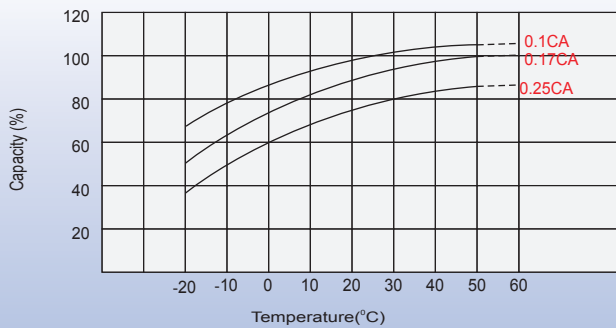
Discharge Characteristics



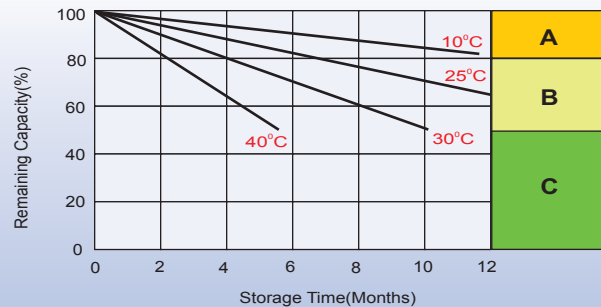
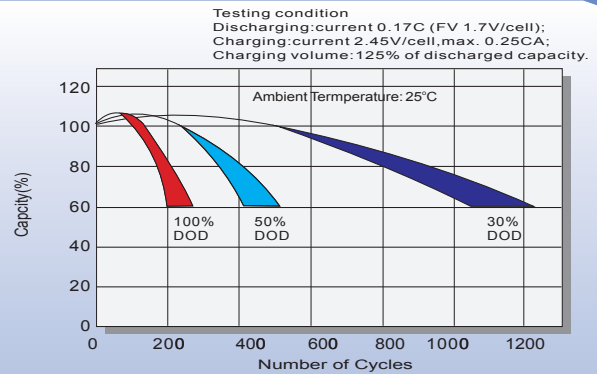
Charging Characteristics (cycle use)



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 limited current 0.25CA and constant volatge 2.25V/cell.
 2. Charged for above 20hours at limited current 0.25CA and constant volatge 2.45V/cell.
 3. Charged for 8~10hours at limited 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