

PBC SERIES -Deep Cycle AGM

PBC12-100 (12V100Ah)

Specification

Nominal Voltage	12V	
Nominal Capacity(10HR)	100.0Ah	
Dimension	Length	330 ± 3mm
	Width	173 ± 2mm
	Container Height	212 ± 3mm
	Total Height (with Terminal)	220 ± 3mm
Approx Weight	Approx 27.5 Kg	
Terminal	T11	
Container Material	ABS	
Rated Capacity	107.0 Ah/5.35A	(20hr, 1.80V/cell, 25°C)
	100.0 Ah/10.0A	(10hr, 1.80V/cell, 25°C)
	80.0 Ah/16.0A	(5hr, 1.75V/cell, 25°C)
	75.0 Ah/25.0A	(3hr, 1.75V/cell, 25°C)
	61.0 Ah/61.0A	(1hr, 1.60V/cell, 25°C)
Max. Discharge Current	1000A (5s)	
Internal Resistance	Approx 4.9mΩ	
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 30.0A. 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



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	95.00	76.00	58.00	47.00	30.00	23.00	19.00	15.00	13.00	11.00	9.50	5.14
1.80V/cell	113.00	89.00	63.00	53.00	32.00	24.00	20.00	15.50	14.00	12.40	10.00	5.35
1.75V/cell	122.00	93.00	67.00	55.00	33.00	25.00	21.00	16.00	14.50	13.00	10.30	5.56
1.70V/cell	128.00	97.00	71.00	57.00	34.00	26.00	21.80	17.00	15.00	14.50	10.70	5.78
1.65V/cell	135.00	100.00	74.00	59.00	36.00	27.00	22.50	18.00	15.50	15.00	11.10	5.99
1.60V/cell	140.00	105.00	77.00	61.00	38.00	28.00	23.50	19.00	16.50	16.00	11.50	6.21

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	175.75	140.60	107.30	86.95	55.50	42.55	35.15	27.75	24.05	20.35	17.58	9.50
1.80V/cell	203.40	160.20	113.40	95.40	57.60	43.20	36.00	27.90	25.20	22.32	18.00	9.63
1.75V/cell	213.50	162.75	117.25	96.25	57.75	43.75	36.75	28.00	25.38	22.75	18.03	9.74
1.70V/cell	217.60	164.90	120.70	96.90	57.80	44.20	37.06	28.90	25.50	24.65	18.19	9.82
1.65V/cell	222.75	165.00	122.10	97.35	59.40	44.55	37.13	29.70	25.58	24.75	18.32	9.89
1.60V/cell	224.00	168.00	123.20	97.60	60.80	44.80	37.60	30.40	26.40	25.60	18.40	9.93

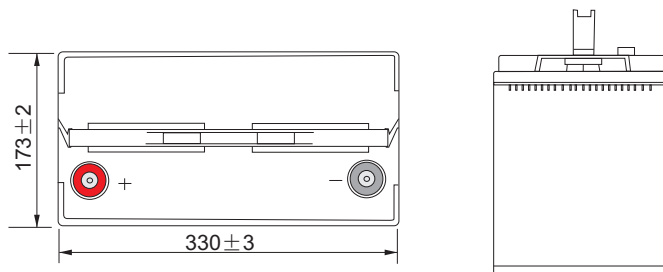
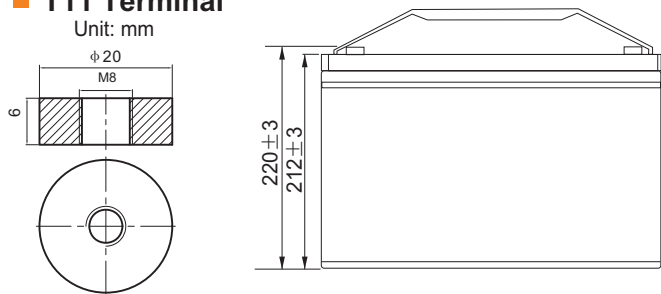
Specifications subject to change without notice.



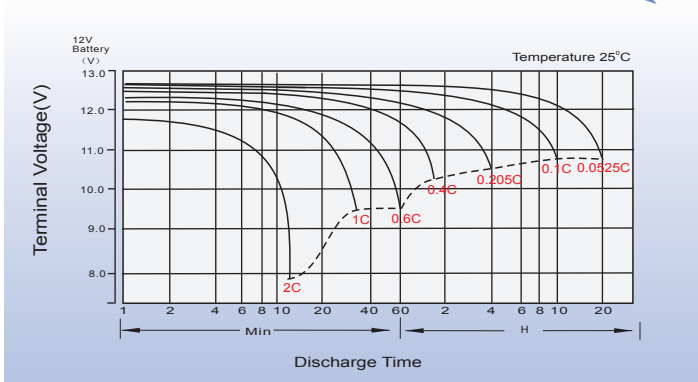
Dimensions

T11 Terminal

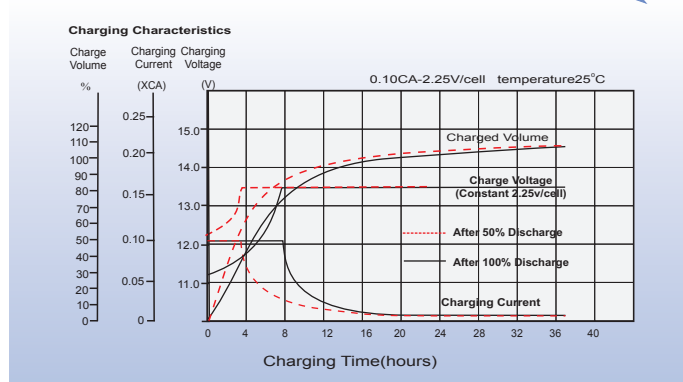
Unit: mm



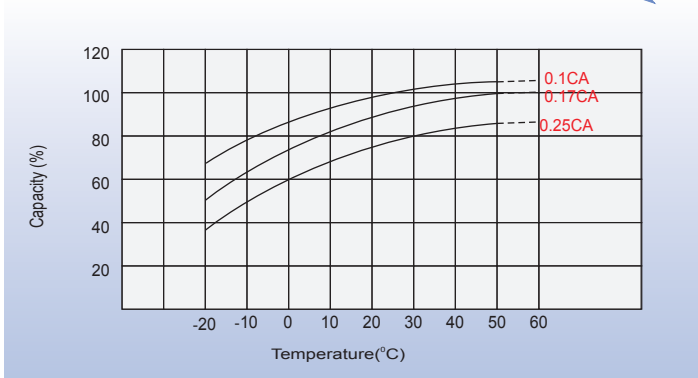
Discharge Characteristics



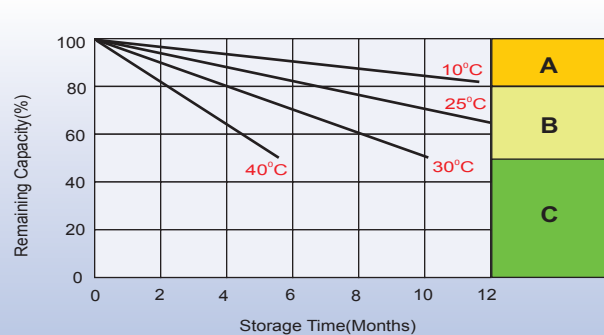
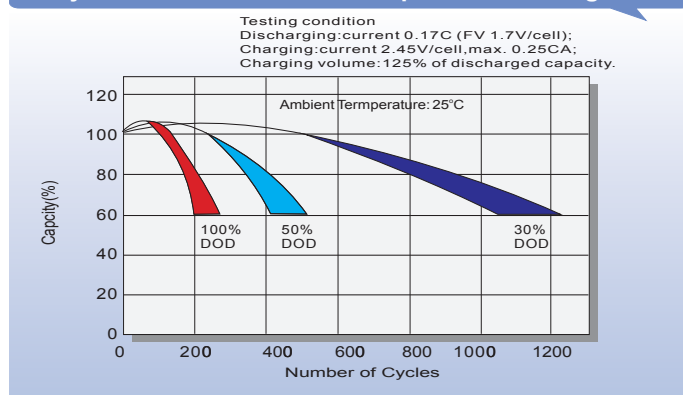
Charging Characteristics (cycle use)



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