

# PBC SERIES - Deep Cycle AGM

## PBC12-200 (12V200Ah)

### Specification

Nominal Voltage	12V		
Nominal Capacity(10HR)	200.0Ah		
Dimension	Length	522 ± 3mm	
	Width	240 ± 3mm	
	Container Height	218 ± 3mm	
	Total Height (with Terminal)	224 ± 3mm	
Approx Weight	Approx 62.2 Kg		
Terminal	T11		
Container Material	ABS		
Rated Capacity	214.4 Ah/10.7A	(20hr, 1.80V/cell, 25°C)	
	200.0 Ah/20.0A	(10hr, 1.80V/cell, 25°C)	
	175.4 Ah/35.1A	(5hr, 1.75V/cell, 25°C)	
	159.0 AHh53.0A	(3hr, 1.75V/cell, 25°C)	
	129.2 Ah/129.2A	(1hr, 1.60V/cell, 25°C)	
Max. Discharge Current	2000A (5s)		
Internal Resistance	Approx 2.7mΩ		
Operating Temp. Range	Discharge	-15 ~ 50°C	
	Charge	0 ~ 40°C	
	Storage	-15 ~ 40°C	
Nominal Operating Temp. Range	25 ± 3° C		
Cycle Use	Initial Charging Current less than 60.0A. 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

- ◆ Electric tools
- ◆ Vehicle in place of walking
- ◆ Lawn mowers
- ◆ Golf trolleys and golf cart
- ◆ Portable apparatus, lights and instruments;
- ◆ Electric toys
- ◆ Illumination light
- ◆ Fire alarms
- ◆ Portable power
- ◆ Wheelchairs
- ◆ Medical equipments.



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

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	292.8	246.4	215.3	154.9	123.0	99.9	62.0	48.4	39.2	31.8	27.8	22.7	18.9	10.62
1.80V/cell	374.2	297.7	254.5	182.8	143.1	111.9	67.7	52.0	41.8	34.2	29.8	24.0	20.0	10.72
1.75V/cell	411.1	325.2	273.8	189.8	148.5	117.0	70.2	53.0	42.8	35.1	30.6	24.5	20.2	10.82
1.70V/cell	448.1	347.2	287.7	197.5	154.4	120.7	73.0	54.5	43.9	36.0	31.2	24.8	20.4	11.02
1.65V/cell	483.6	369.2	305.7	208.4	158.3	124.8	75.0	56.8	45.4	37.0	31.9	25.2	20.8	11.16
1.60V/cell	\	394.8	325.6	220.0	165.0	129.2	77.6	58.5	46.8	38.2	32.6	25.4	21.0	11.22

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

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	546.3	464.5	410.3	297.7	238.1	193.8	120.9	94.5	76.7	62.5	54.9	44.8	37.4	21.3
1.80V/cell	688.8	552.9	477.6	347.1	274.6	215.8	131.1	101.2	81.5	66.9	58.6	47.5	39.6	21.4
1.75V/cell	747.5	598.1	509.6	358.5	283.6	224.9	135.6	102.8	83.2	68.6	60.1	48.3	40.0	21.6
1.70V/cell	803.4	633.9	532.5	371.7	294.1	231.5	140.7	105.4	85.2	70.1	61.3	48.9	40.3	22.0
1.65V/cell	860.8	669.7	563.0	390.3	300.3	238.5	144.2	109.6	87.9	72.0	62.6	49.6	41.1	22.2
1.60V/cell	\	707.6	593.6	408.1	310.2	244.9	148.1	112.4	90.3	74.0	63.8	50.0	41.5	22.3

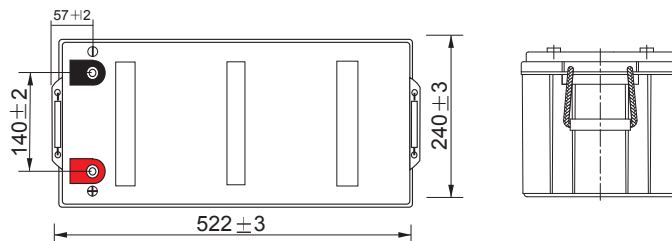
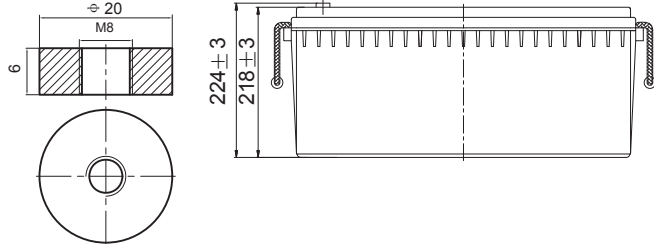
Specifications subject to change without notice.



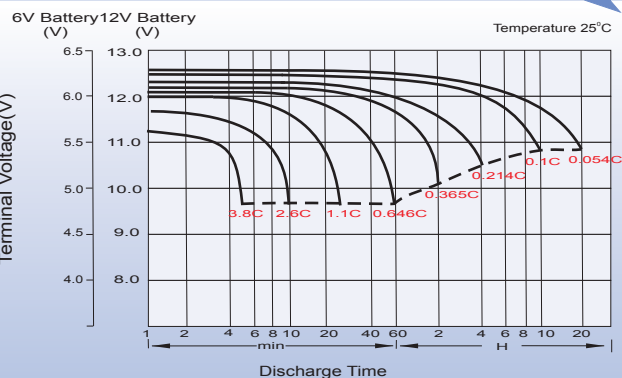
# Dimensions

## T11 Terminal

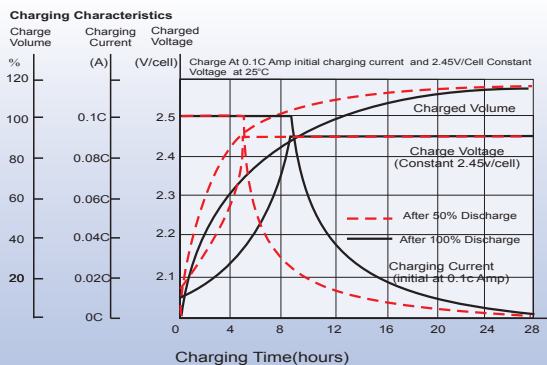
Unit: mm



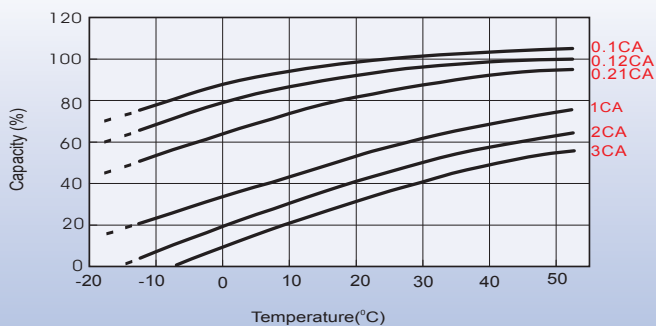
## Discharge Characteristics



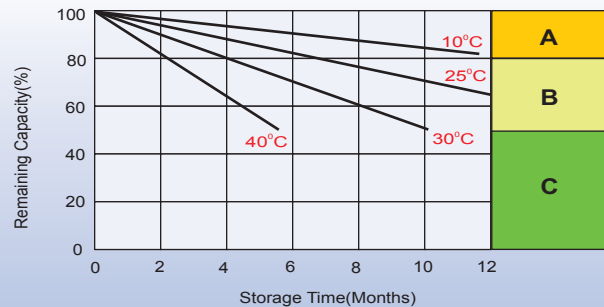
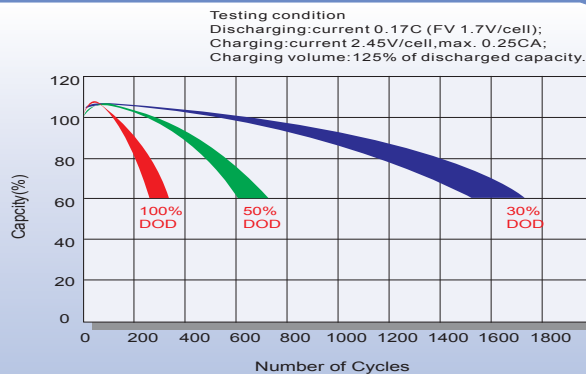
## Charging Characteristics (cycle use)



## 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.