

PBCG SERIES - Deep Cycle GEL

PBCG12-55(12V55Ah)

Specification

Nominal Voltage	12V	
Nominal Capacity(10HR)	55.0AH	
Dimension	Length	229 ±2mm
	Width	138 ±2mm
	Container Height	205 ±2mm
	Total Height (with Terminal)	211 ±2mm
Approx Weight	Approx 16.5 kg	
Terminal	T6	
Container Material	ABS	
Rated Capacity	56.6 AH/2.83A	(20hr ,1.80V/cell,25°C/77°F)
	55.0 AH/5.50A	(10hr,1.80V/cell,25°C/77°F)
	46.8 AH/9.35A	(5hr,1.75V/cell,25°C/77°F)
	40.5 AH/13.5A	(3hr,1.75V/cell,25°C/77°F)
	32.8 AH/32.8A	(1hr,1.60V/cell,25°C/77°F)
Max. Discharge Current	600A (5s)	
Internal Resistance	Approx 8.0mΩ	
Operating Temp.Range	Discharge : -15~50°C (5~122°F)	
	Charge : 0~40°C (32~104°F)	
	Storage : -15~40°C (5~104°F)	
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Cycle Use	Initial Charging Current less than16.5A.Voltage	
	14.4V~15.0V at 25°C(77°F)Temp. Coefficient -30mV/°C	
Standby Use	No limit on Initial Charging Current Voltage	
	13.5V~13.8V at 25°C(77°F)Temp. Coefficient -20mV/°C	
Capacity affected by Temperature	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	PBCG series batteries may be stored for up to 9 months at 25°C(77°F) 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	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	88.7	69.7	59.3	49.6	39.2	29.8	24.6	15.7	12.2	10.0	8.49	7.40	6.02	5.10	2.75
1.80V/cell	117.3	87.8	70.6	57.8	45.1	33.8	27.4	17.0	13.1	10.6	9.13	7.94	6.42	5.50	2.83
1.75V/cell	135.0	98.4	78.7	63.4	48.1	35.7	29.0	17.8	13.5	11.0	9.35	8.16	6.53	5.56	2.86
1.70V/cell	150.4	108.6	85.0	67.4	50.7	37.5	30.2	18.7	14.0	11.3	9.60	8.33	6.62	5.58	2.92
1.65V/cell	164.2	116.0	89.5	70.9	53.1	38.6	31.3	19.2	14.5	11.7	9.82	8.52	6.72	5.64	2.94
1.60V/cell	182.6	127.0	96.5	76.2	56.4	40.8	32.8	19.9	15.0	11.9	10.0	8.70	6.81	5.73	2.97

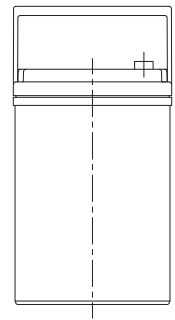
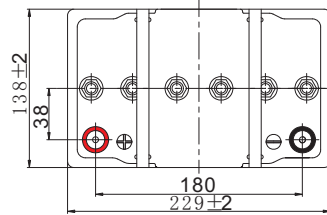
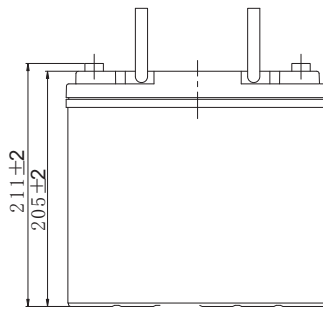
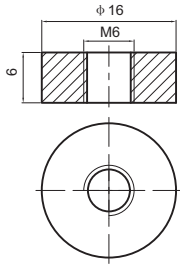
Constant Power Discharge (Watts) at 25 °C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	163.4	129.8	111.5	94.2	75.1	57.5	47.7	30.5	23.8	19.6	16.7	14.6	11.9	10.1	5.47
1.80V/cell	214.0	161.6	131.0	108.2	85.3	64.7	52.8	33.0	25.4	20.8	17.9	15.6	12.7	10.9	5.62
1.75V/cell	240.8	178.2	144.2	117.6	90.2	67.9	55.6	34.4	26.2	21.4	18.3	16.0	12.9	11.0	5.67
1.70V/cell	260.4	191.7	153.3	123.9	94.5	70.9	57.8	36.0	27.1	22.0	18.7	16.3	13.0	11.0	5.78
1.65V/cell	279.8	202.6	159.9	129.1	98.0	72.4	59.4	36.8	28.0	22.6	19.1	16.6	13.2	11.1	5.82
1.60V/cell	303.9	216.7	169.6	137.1	103.3	76.1	62.0	37.9	28.8	23.0	19.4	16.9	13.3	11.3	5.87

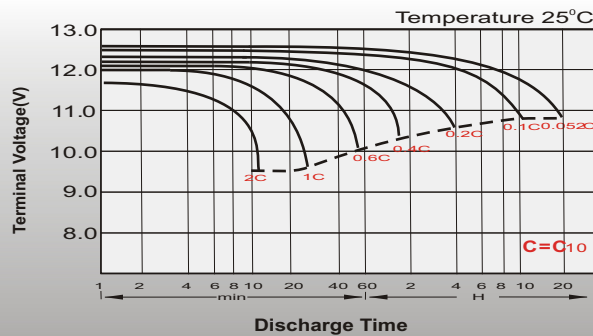
Dimensions

T6 Terminal

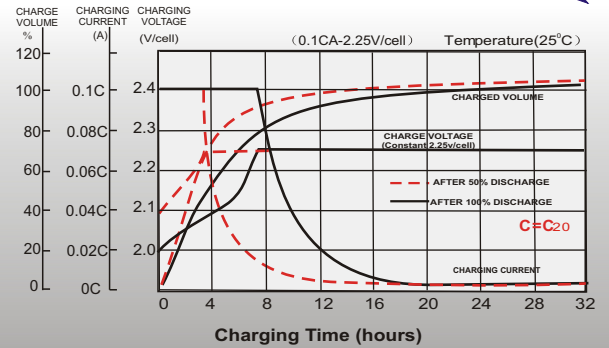
Unit: mm



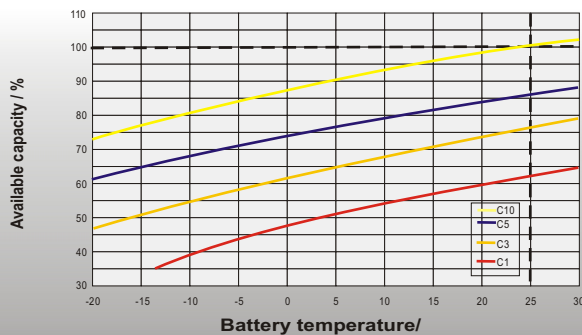
Discharge Characteristics



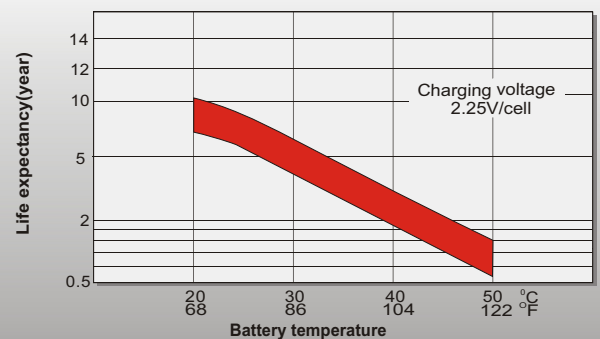
Float Charging Characteristics



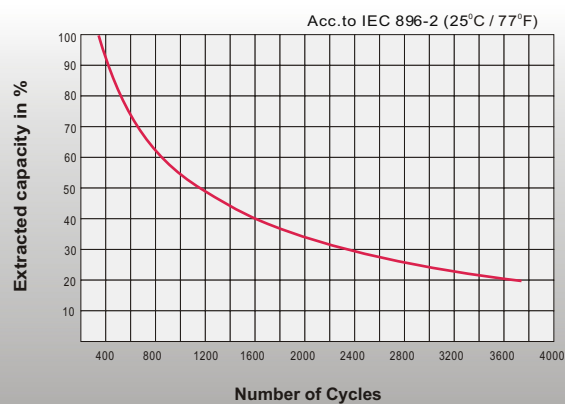
Temperature Effects in Relation to Battery Capacity



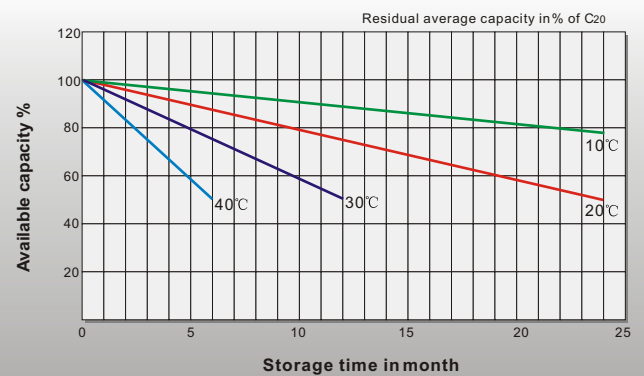
Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



General Relation of Capacity VS. Storage Time



Contact