

# PBCG SERIES - Deep Cycle GEL

## PBCG12-20(12V20Ah)

### Specification

Nominal Voltage	12V	
Nominal Capacity(20HR)	20.0Ah	
Dimensions	Length	181.5 ± 2mm
	Width	77 ± 2mm
	Container Height	167.5 ± 2mm
	Total Height (with Terminal)	167.5 ± 2mm
Approx Weight	Approx 5.5 kg	
Terminal	T12	
Container Material	ABS	
Rated Capacity	20.4 Ah/1.02A	(20hr, 1.80V/cell, 25°C)
	19.6 Ah/1.96A	(10hr, 1.75V/cell, 25°C)
	15.2 Ah/3.04A	(5hr, 1.75V/cell, 25°C)
	14.25 Ah/4.75A	(3hr, 1.75V/cell, 25°C)
	11.21 Ah/11.21A	(1hr, 1.65V/cell, 25°C)
Max. Discharge Current	200A (5s)	
Internal Resistance	Approx 17.9mΩ	
Operating Temp. Range	Discharge	-20 ~ 55°C
	Charge	0 ~ 40°C
	Storage	-20 ~ 50°C
Nominal Operating Temp. Range	25 ± 3° C	
Cycle Use	Initial Charging Current less than 4.25A. 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	PBCG series batteries may be stored for up to 9 months at 25° C and then a freshening charge is required.	
	For higher temperatures the time interval will be shorter.	



### Applications

- ◆ Telecommunications
- ◆ Solar system
- ◆ Wind power system
- ◆ Wheelchair
- ◆ Floor cleaning machines
- ◆ Golf trolley
- ◆ Boats

Intertek



### 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	18.05	14.44	11.02	8.93	5.70	4.37	3.61	2.85	2.47	2.09	1.81	0.98
1.80V/cell	21.47	16.91	11.97	10.07	6.08	4.56	3.80	2.95	2.66	2.36	1.90	1.02
1.75V/cell	23.18	17.67	12.73	10.45	6.27	4.75	3.99	3.04	2.76	2.47	1.96	1.06
1.70V/cell	24.32	18.43	13.49	10.83	6.46	4.94	4.14	3.23	2.85	2.76	2.03	1.10
1.65V/cell	25.65	19.00	14.06	11.21	6.84	5.13	4.28	3.42	2.95	2.85	2.11	1.14
1.60V/cell	26.90	19.95	14.63	11.59	7.22	5.32	4.47	3.61	3.14	3.04	2.19	1.18

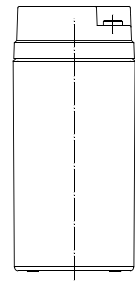
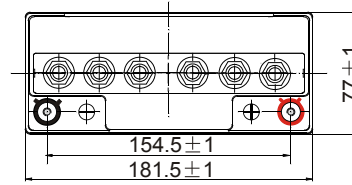
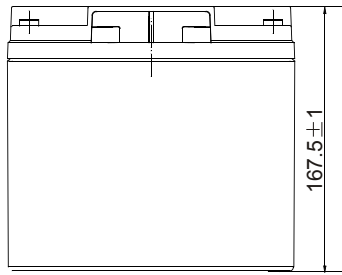
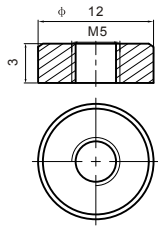
### Constant Power Discharge (Watts/cell) at 25 °C (77°F)

F.V/Time	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	33.39	26.71	20.39	16.52	10.55	8.08	6.68	5.27	4.57	3.87	3.34	1.81
1.80V/cell	38.65	30.44	21.55	18.13	10.94	8.21	6.84	5.30	4.79	4.24	3.42	1.83
1.75V/cell	40.57	30.92	22.28	18.29	10.97	8.31	6.98	5.32	4.82	4.32	3.42	1.85
1.70V/cell	41.34	31.33	22.93	18.41	10.98	8.40	7.04	5.49	4.85	4.68	3.46	1.87
1.65V/cell	42.32	31.35	23.20	18.50	11.29	8.46	7.05	5.64	4.86	4.70	3.48	1.88
1.60V/cell	42.56	31.92	23.41	18.54	11.55	8.51	7.14	5.78	5.02	4.86	3.50	1.89

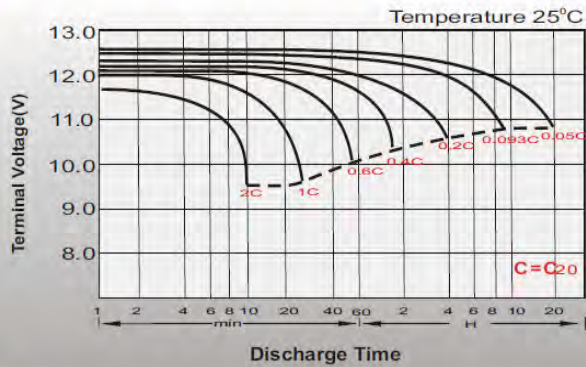
# Dimensions

## T12 Terminal

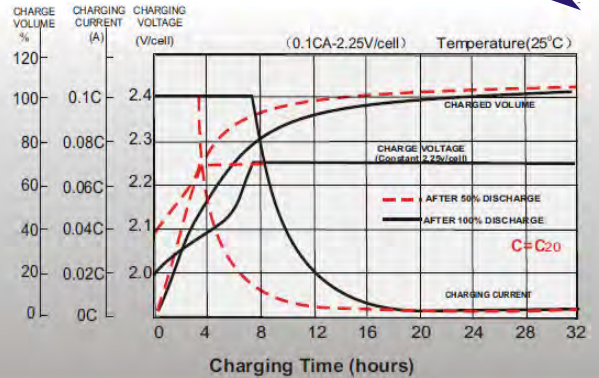
Unit: mm



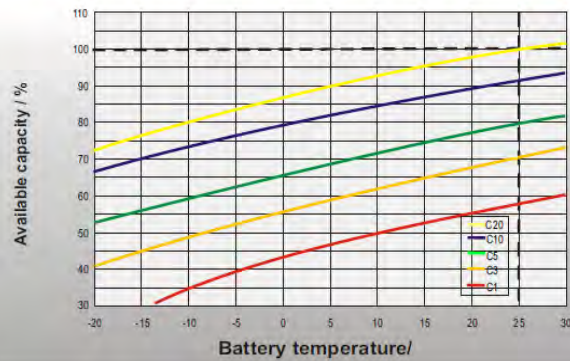
## Discharge Characteristics



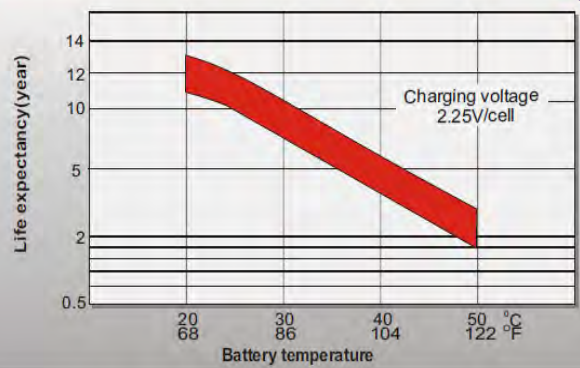
## Float Charging Characteristics



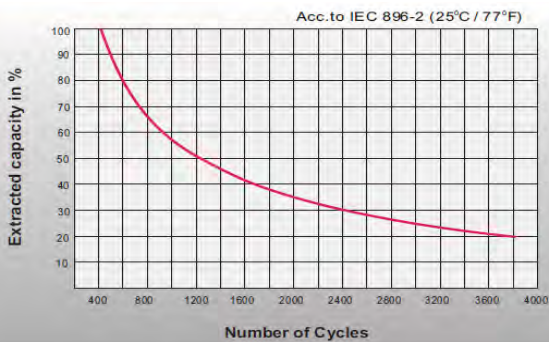
## Temperature Effects in Relation to Battery Capacity



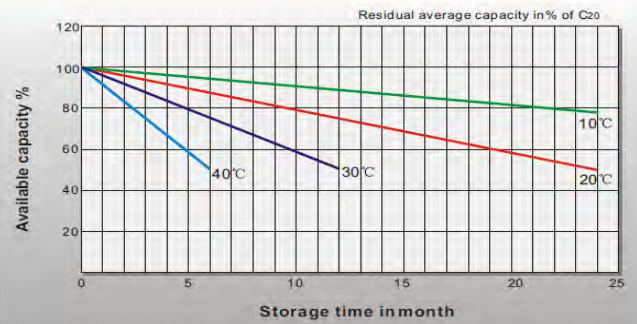
## Effect of Temperature on Long Term Float Life



## Cycle Life in Relation to Depth of Discharge



## General Relation of Capacity VS. Storage Time



## Contact