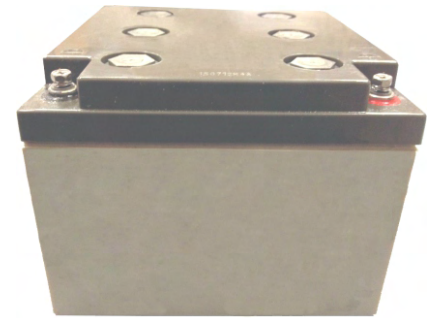


# PBCG SERIES - Deep Cycle GEL

## PBCG12-28(12V28Ah)



### Specification

Nominal Voltage	12V	
Nominal Capacity(20HR)	28.0Ah	
Dimensions	Length	166 ±2mm
	Width	175 ±2mm
	Container Height	125 ±2mm
	Total Height (with Terminal)	125 ±2mm
Approx Weight	Approx 8.6 kg	
Terminal	T12	
Container Material	ABS	
Rated Capacity	28.0 Ah/1.40A	(20hr, 1.80V/cell, 25°C)
	25.9 Ah/2.59A	(10hr, 1.80V/cell, 25°C)
	23.6 Ah/4.71A	(5hr, 1.75V/cell, 25°C)
	20.9 Ah/6.95A	(3hr, 1.75V/cell, 25°C)
	17.3 Ah/17.3A	(1hr, 1.60V/cell, 25°C)
Max. Discharge Current	420A (5s)	
Internal Resistance	Approx 14mΩ	
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 7.8A. 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	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	49.2	37.7	31.2	27.0	21.0	15.7	13.3	8.09	6.24	5.13	4.31	3.67	2.94	2.50	1.37
1.80V/cell	64.9	47.5	37.2	31.5	24.2	17.9	14.7	8.79	6.72	5.45	4.56	3.89	3.11	2.59	1.40
1.75V/cell	74.7	53.3	41.5	34.5	25.8	18.9	15.6	9.22	6.95	5.65	4.71	4.00	3.18	2.65	1.42
1.70V/cell	83.2	58.7	44.7	36.7	27.2	19.8	16.3	9.60	7.20	5.81	4.85	4.12	3.24	2.71	1.44
1.65V/cell	91.0	62.8	47.2	38.6	28.5	20.5	16.7	9.80	7.46	5.99	4.96	4.20	3.30	2.76	1.46
1.60V/cell	101.0	68.6	50.8	41.5	30.3	21.6	17.3	10.20	7.72	6.18	5.13	4.30	3.34	2.80	1.48

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

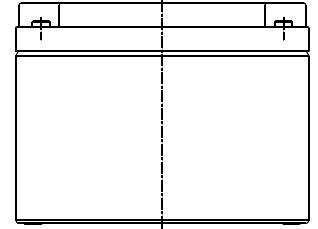
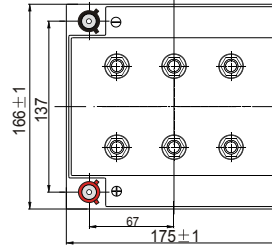
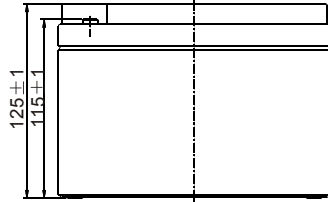
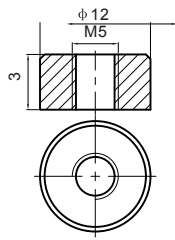
F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	92.6	71.2	59.4	51.6	40.5	30.5	25.8	15.8	12.2	10.08	8.50	7.27	5.85	4.98	2.73
1.80V/cell	120.2	88.5	69.7	59.5	46.2	34.4	28.5	17.1	13.1	10.68	8.98	7.68	6.16	5.16	2.79
1.75V/cell	135.6	97.6	76.7	64.4	48.7	36.1	30.0	17.9	13.5	11.03	9.24	7.89	6.29	5.27	2.83
1.70V/cell	148.1	105.7	81.4	67.8	51.1	37.7	31.2	18.5	14.0	11.32	9.48	8.09	6.41	5.38	2.87
1.65V/cell	159.0	111.2	84.6	70.5	52.9	38.6	31.8	18.8	14.4	11.63	9.66	8.22	6.51	5.46	2.90
1.60V/cell	173.2	119.2	89.6	75.0	55.6	40.4	32.9	19.5	14.9	11.97	9.97	8.39	6.58	5.54	2.93



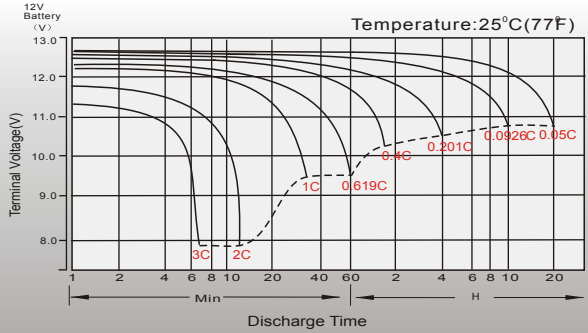
# Dimensions

## T12 Terminal

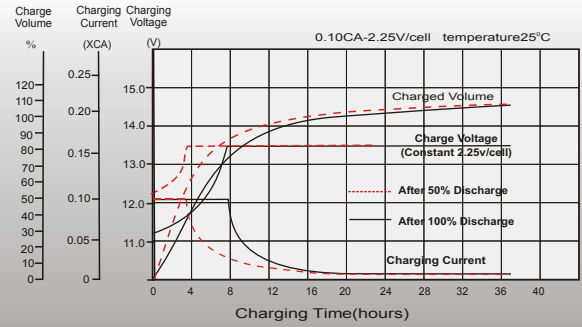
Unit: mm



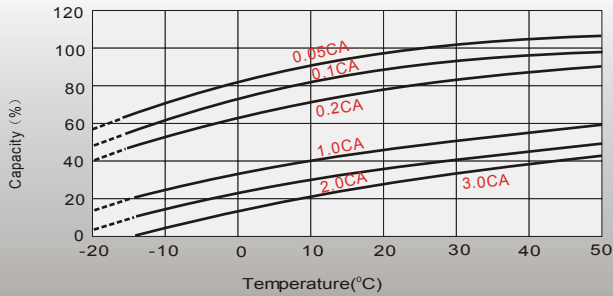
## Discharge Characteristics



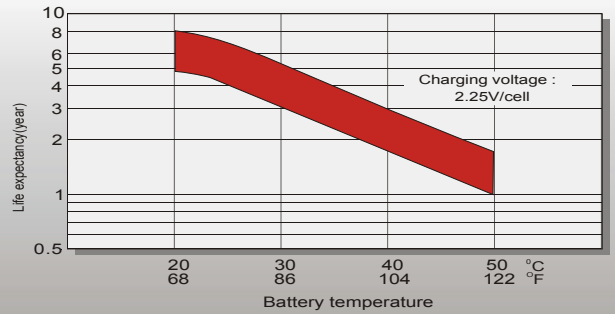
## Float Charging Characteristics



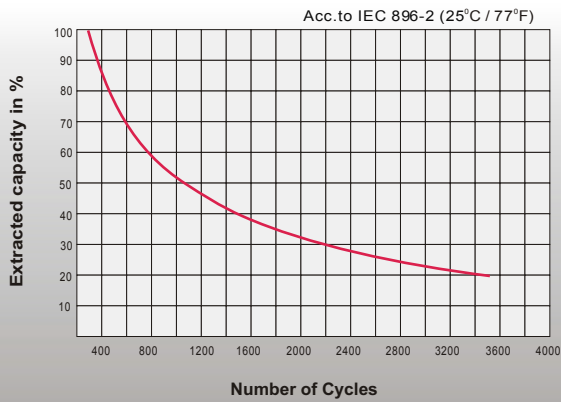
## Temperature Effects in Relation to Battery Capacity



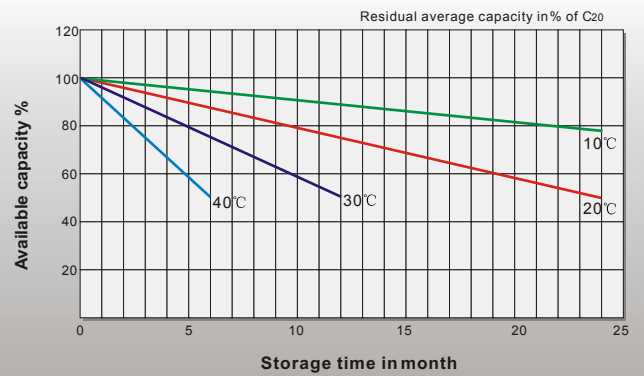
## Effect of Temperature on Long Term Float Life



## Cycle Life in Relation to Depth of Discharge



## General Relation of Capacity VS. Storage Time



## Contact