

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

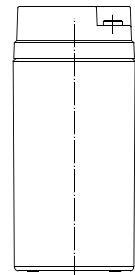
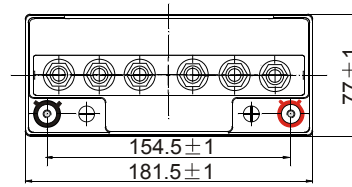
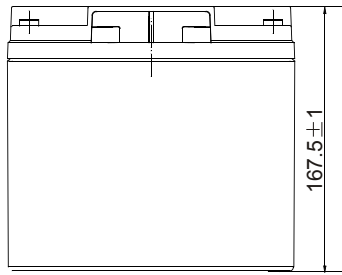
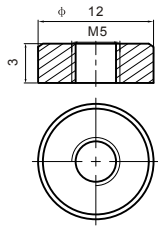
Constant Power Discharge (Watts/cell) at 25 °C (77°F)

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

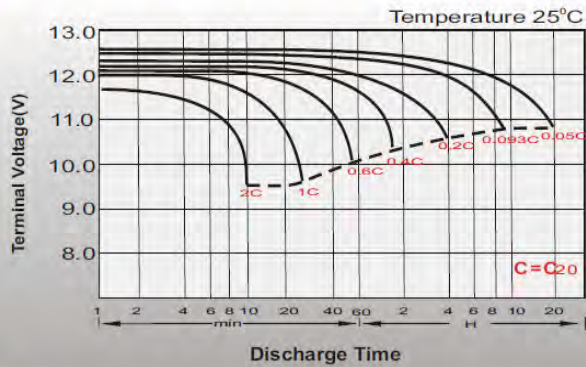
Dimensions

T12 Terminal

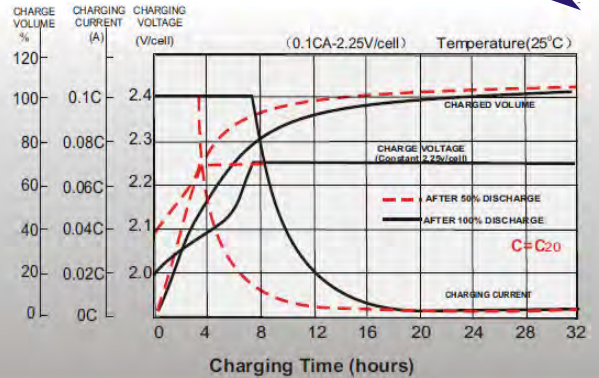
Unit: mm



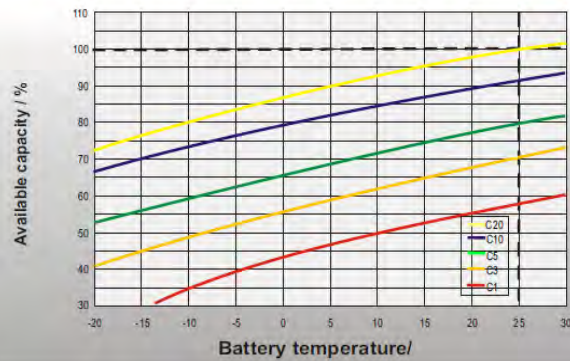
Discharge Characteristics



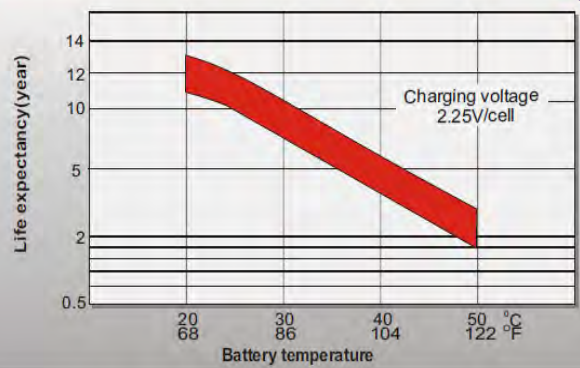
Float Charging Characteristics



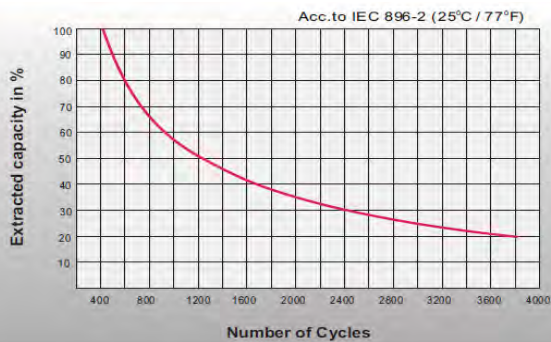
Temperature Effects in Relation to Battery Capacity



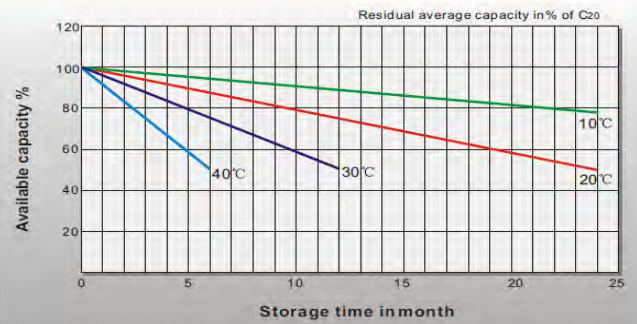
Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



General Relation of Capacity VS. Storage Time



Contact