

BPG12-100

12V 100Ah

Deep-Cycle Gel Battery

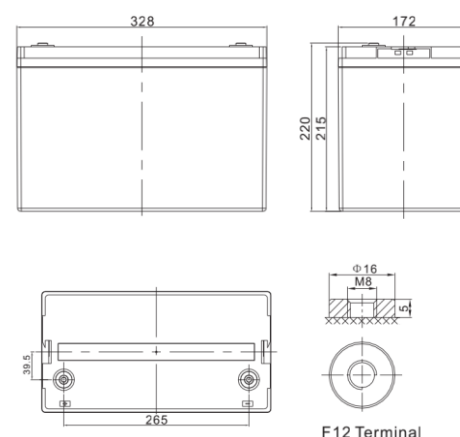


Specifications

Rated Voltage	12V	
Nominal Capacity	100Ah	(C20, 1.75V/cell)
Dimension	Length	328±2mm (12.9inches)
	Width	173±1mm (6.77 inches)
	Container Height	216±1mm (8.46 inches)
	Total Height	223±1mm (8.66 inches)
Approx	28.8 Kg (63.4 lbs)	
Terminal	Bolt M8	
Container Material	ABS	
Rated Capacity(25°C)	100.00 Ah	(20hr,5A, 1.75V/cell)
	88.00 Ah	(10hr,10A, 1.75V/cell)
	77.00 Ah	(5hr,17A, 1.75V/cell)
	68.40 Ah	(3hr,25A, 1.75V/cell)
Max. Discharge Current	1000A (5s)	
Internal Resistance(25°C)	Approx 5.5mΩ	
Operating Temp. Range	Discharge	-15~50°C (5~122°F)
	Charge	-20~40°C (-4~104°F)
	Storage	-15~40°C (5~104°F)
Nominal Operating Temp.Range	25±3°C (77±5°F)	
Cycle Use	Initial Charging Current less than 26.4A. Voltage 14.2V ~14.4V at 25°C (77°F)Temp. Coefficient -4mV/ °C	
Standby Use	Initial Charging Current less than 26.4A. Voltage 13.6V~13.8V at 25°C(77°F)Temp. Coefficient -3mV/°C	
Effect of temp. to Capacity	40 °C((104°F)	103%
	25 °C((77°F)	100%
	0 °C((32°F)	86%
Self Discharge	BPG series batteries may be stored for up to 6 months at 250 C(77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	



Layout



Constant Current Discharge Data Sheet (@25°C) Unit: A

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	163.7	132.8	87.1	54.3	33.2	24.9	19.8	16.7	11.3	9.28	5.20
1.65V	154.7	126.9	83.6	52.4	32.1	24.1	19.3	16.2	11.1	9.17	5.12
1.70V	142.4	118.9	79.9	50.7	31.1	23.5	18.8	15.8	11.0	9.03	5.06
1.75V	130.4	110.6	76.4	48.9	30.0	22.8	18.3	15.4	10.8	8.91	5.00
1.80V	118.0	102.2	73.0	47.0	28.9	22.0	17.8	15.0	10.6	8.80	4.95
1.85V	96.4	84.8	62.9	42.2	26.5	20.4	16.5	14.0	10.0	8.28	4.70

Constant Power Discharge Data Sheet (@25°C) Unit: W

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	316.2	263.8	179.8	116.0	71.5	54.0	43.3	36.5	25.0	20.7	11.6
1.65V	300.9	253.5	174.1	112.8	69.5	52.7	42.3	35.7	24.7	20.5	11.5
1.70V	285.6	243.3	168.4	109.6	67.6	51.3	41.3	34.9	24.4	20.2	11.4
1.75V	266.1	229.7	162.6	106.3	65.5	50.0	40.4	34.1	24.1	20.0	11.2
1.80V	245.1	215.1	157.0	102.8	63.5	48.7	39.4	33.3	23.8	19.8	11.1
1.85V	203.9	181.0	136.6	92.8	58.5	45.2	36.7	31.2	22.4	18.6	10.6

Applications

- All purpose
- Uninterruptable Power Supply (UPS)
- Electric Power System (EPS)
- Emergency backup power supply
- Alarm and security system
- Communication power supply
- DC power supply
- Auto control system

General Features

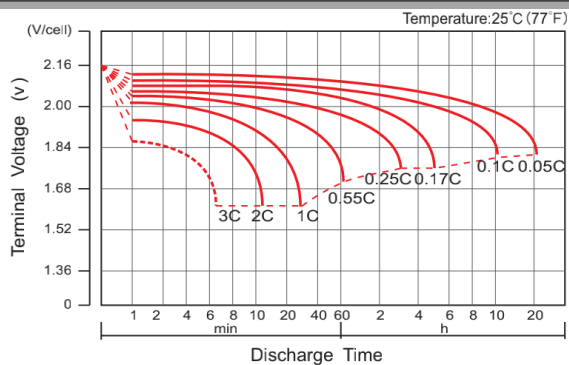
- 20 years design life(25 °C)
- Ability to deeply discharge
- Maintenance-free
- Spill-free / Spill-proof
- Excellent cycle life
- VRLA Gel technology
- High reliability
- Oxygen recombination technology

Standards

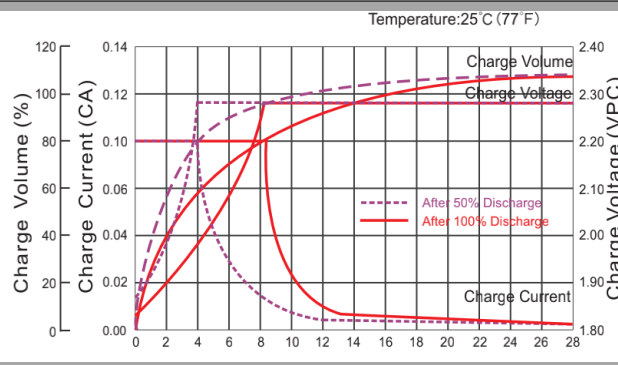
- Compliance with IEC 60896 standards, EU Battery Directive
- UL, CE Certified
- Manufactured @IA TF 16949, ISO45001,ISO 9001 and ISO 14001 certified production facilities

NOTE : The battery should be charged within 6 months of storage, Otherwise, permanent loss of capacity might occur as a result of sulfation

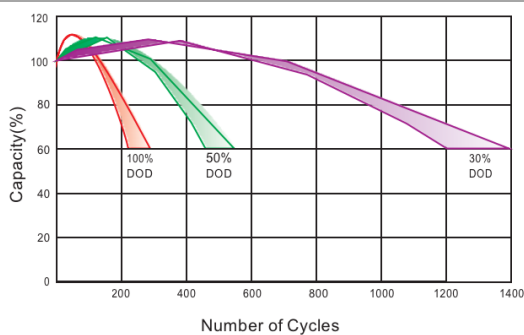
Charge Characteristics



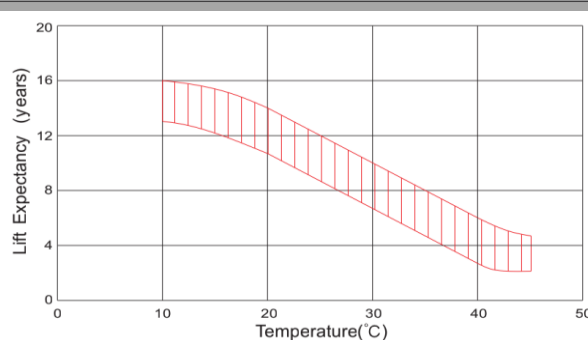
Discharge Characteristic



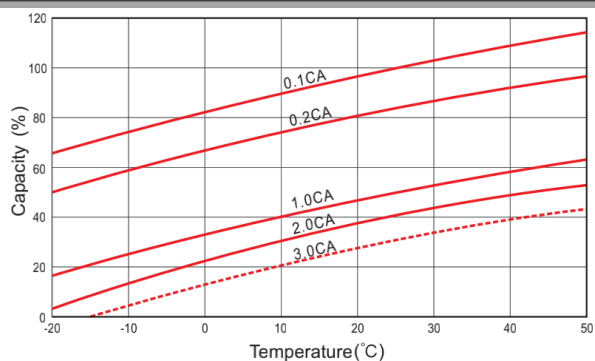
Cycle Life in Relation to Depth of Discharge



Temperature vs Float Life



Capacity Curve At Different Temperature



Self Discharge Characteristics

