

# BG-1290F2

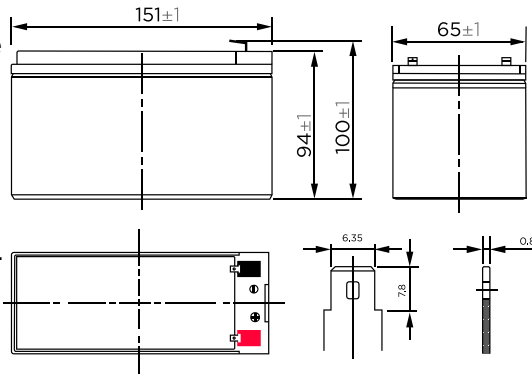
(12V 9.0Ah/20hr)

Rechargeable Sealed Lead Acid Battery



Technical Specification Sheet

These rechargeable batteries are lead-lead dioxide systems. The dilute sulfuric acid electrolyte is absorbed by separators and thus immobilized. Should the battery be accidentally overcharged producing hydrogen and oxygen, special one-way valves allow the gases to escape thus avoiding excessive pressure build-up. Otherwise, the battery is completely sealed and is, therefore, maintenance-free, leak proof and usable in any position.



Unit: mm

Terminal F2



## Performance Characteristics

<b>Capacity 77°F(25°C)</b>	20 hour rate (0.45A, 10.5V)	9.0Ah
	10 hour rate (0.85A, 10.5V)	8.5Ah
	5 hour rate (1.54A, 10.5V)	7.7Ah
	1 hour rate (5.8A, 9.6V)	5.8Ah
<b>Internal Resistance</b>	Full charged Battery 77°F(25°C): 20mΩ	
<b>Capacity affected by Temperature (20 hour rate)</b>	104°F(40°C)	102%
	77°F(25°C)	100%
	32°F(10°C)	85%
	5°F(-15°C)	65%
<b>Self-Discharge 68°F(20°C)</b>	Capacity after 3 month storage	90%
	Capacity after 6 month storage	80%
	Capacity after 12month storage	60%
<b>Max. discharge current 77°F(25°C): 135A(5S)</b>		
<b>Charge (Constant Voltage)</b>	Float: 13.6-13.8 V/77°F/(25°C)	
	Cycle: 14.5-14.9 V/77°F/(25°C) Max. Current: 2.25A	

## SPECIFICATION

Nominal voltage	_____
Number of cells	_____
Length (mm/inch)	_____
Width (mm/inch)	_____ 12V
Height (mm/inch)	_____ 6
Total Height (mm/inch)	_____ 151/5.94
Approx. Weight (kg/lbs)	_____ 65/2.56
	_____ 94/3.7
	_____ 100/3.94
<b>General Features</b>	<b>6</b>

- Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance or water adding.
- Not restricted for air transport-complies with IATA/ICAO Special Provision A67.
- UL-recognized component.
- Can be mounted in any orientation.
- Computer designed lead, calcium tin alloy grid for high power density.
- Long service life, float or cyclic applications.
- Maintenance-free operation.
- Low self discharge.

## Discharge Constant Current (Amperes at 77°F 25°C)

End Points Volts/Cell	5 min	10 min	15 min	30 min	1h	3h	5h	10h	20h
1.60V	32.5	24.0	16.8	9.90	5.80	2.33	1.60	0.88	0.47
1.65V	31.7	23.5	16.3	9.79	5.75	2.29	1.56	0.87	0.46
1.70V	30.5	22.7	15.8	9.36	5.71	2.25	1.55	0.86	0.46
1.75V	29.8	21.8	14.8	8.91	5.66	2.20	1.54	0.85	0.45
1.80V	29.2	21.0	13.9	8.45	5.51	2.14	1.53	0.83	0.44

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

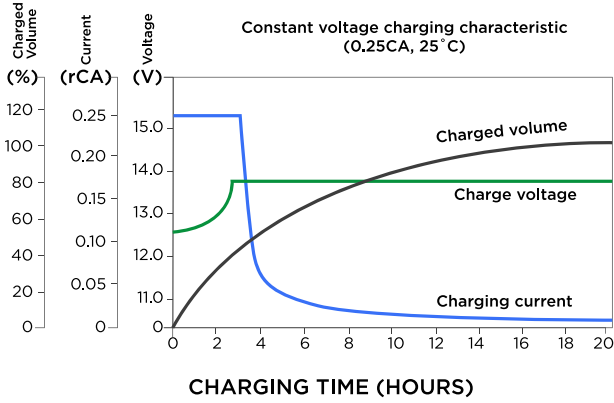
End Points Volts/Cell	5 min	10 min	15 min	30 min	45 min	1h	2h	3h	5h
1.60V	71.7	44.8	34.6	19.6	14.5	11.5	6.30	4.34	3.10
1.65V	68.3	44.3	34.1	19.1	14.2	11.2	6.23	4.29	3.04
1.70V	64.8	42.9	32.1	18.5	13.7	11.0	6.08	4.20	2.98
1.75V	61.4	41.1	31.2	17.6	12.9	10.7	5.94	4.08	2.92
1.80V	58.0	39.2	29.4	16.6	12.2	10.4	5.77	3.92	2.85

## Battery Construction

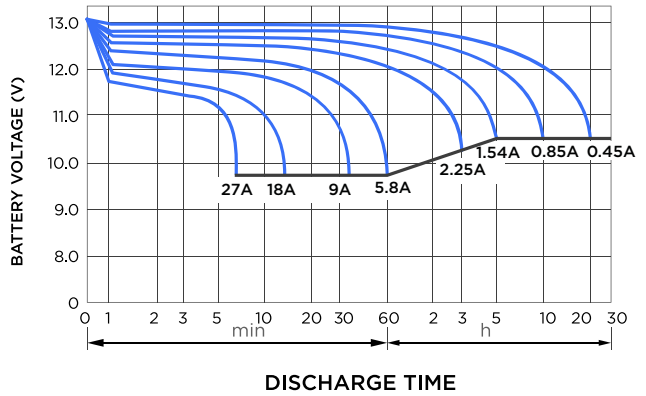
Component	Positive plate	Negative plate	Container	Cover	Safety valve	Terminal	Separator	Electrolyte
Raw material	Lead dioxide	Lead	ABS	ABS	Rubber	Copper	Fiberglass	Sulfuric acid



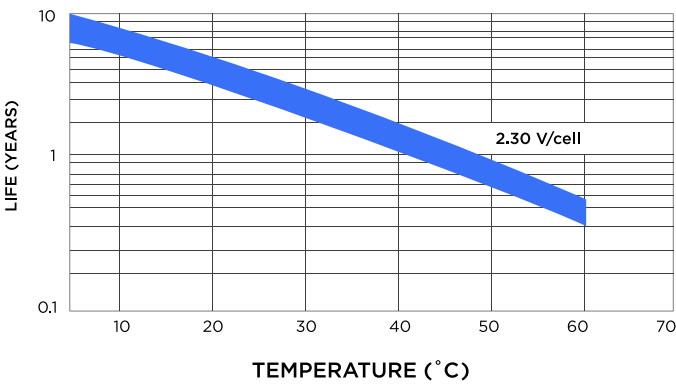
### Charge characteristic curve



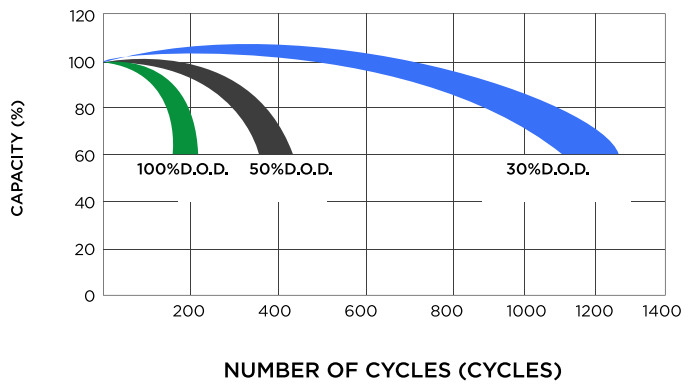
### Discharge characteristic (25°C)



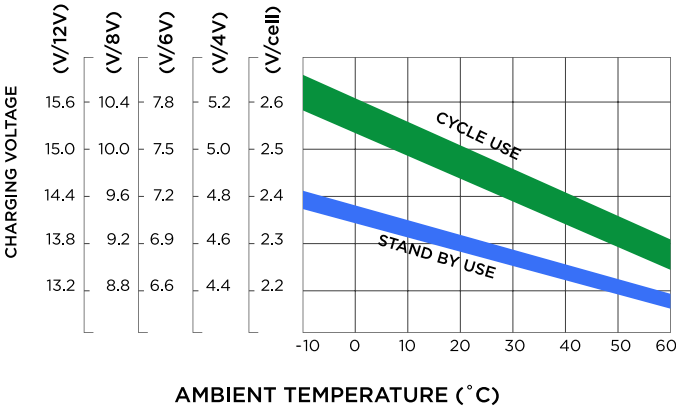
### Temperature effects on float life



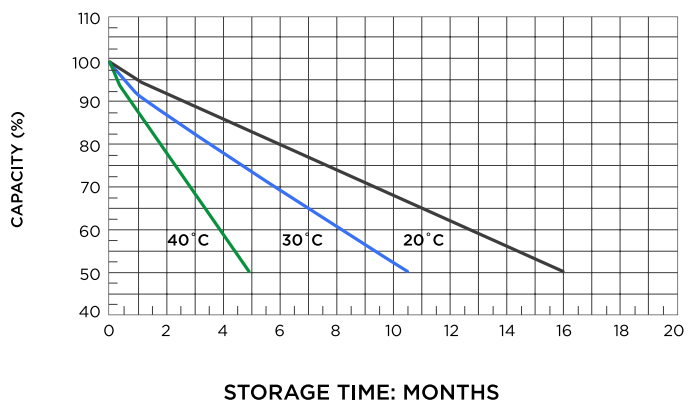
### Cycle service life in relation to depth of discharge



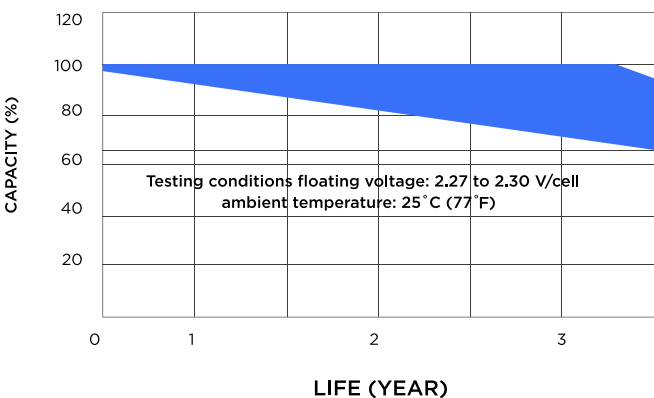
### Relationship between charging voltage and temperature



### Self-discharge characteristic



### Life characteristics of standby use



### Temperature effects on capacity

