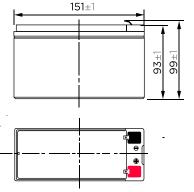
# **BG-1270F1 & F2** (12V 7.0Ah/20hr)

**Rechargeable Sealed Lead Acid Battery** 



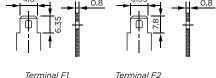
Technical Specification Sheet

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





Performance Characteristics						
	20 hour rate (0.35A, 10.5V)	7.0Ah				
	10 hour rate (0.66A, 10.5V)	6.6Ah				
Capacity 77°F(25°C)	5 hour rate (1.2A, 10.5V)	6.0Ah				
	1 hour rate (4.3A, 9.6V)	4.3Ah				
Internal Resistance	Full charged Battery77°F(25°C):22mΩ					
	104°F(40°C)	102%				
Capacity affected by	77°F(25°C)	100%				
Temperature (20 hour rate)	32°F(10°C)	85%				
	5°F(-15°C)	65%				
	Capacity after 3 month storage	90%				
Self-Discharge 68°F(20°C)	Capacity after 6 month storage	80%				
001(200)	Capacity after 12month storage	60%				
Max. discharge current 77°F(25°C): 105A(5S)						
Charge	Float: 13.6-13.8 V/77°F/(25°C)					
(Constant Voltage)	Cycle: 14.5-14.9 V/77°F/(25°C)					

Cycle: 14.5~14.9 V/77°F/(25°C) Max. Current: 1.75A

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	28.0	17.6	14.2	8.00	4.30	1.89	1.26	0.69	0.36
1.65V	26.5	16.8	13.6	7.70	4.20	1.84	1.24	0.68	0.36
1.70V	25.0	16.0	13.0	7.39	4.10	1.80	1.22	0.67	0.35
1.75V	23.5	15.2	12.4	7.10	4.00	1.74	1.20	0.66	0.35
1.80V	22.1	14.4	11.8	6.83	3.90	1.68	1.18	0.65	0.34

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	51.7	34.7	27.2	15.0	11.4	8.80	5.02	3.56	2.30
1.65V	49.2	33.0	26.1	14.4	10.8	8.40	4.89	3.47	2.26
1.70V	46.6	31.1	25.0	13.9	10.3	8.00	4.77	3.38	2.22
1.75V	44.1	29.3	24.1	13.3	9.90	7.60	4.62	3.28	2.18
1.80V	41.4	27.7	23.0	12.8	9.60	7.31	4.47	3.17	2.12

SPECIFICATION
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Nominal voltage	_12V
Number of cells	6
Length (mm/inch)	151/5.94
Width (mm/inch)	_ 65/2.56
Height (mm/inch)	_ 93/3.66
Total Height (mm/inch)	_ 99/3.90
Approx.Weight (kg/lbs)	_ 2.12/4.67

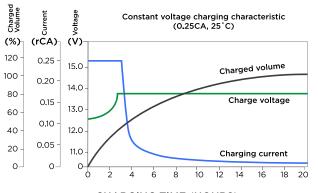
## **General Features**

- 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.

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



CHARGING TIME (HOURS)

2.30 V/cell

50

60

70

Temperature effects on float life

10

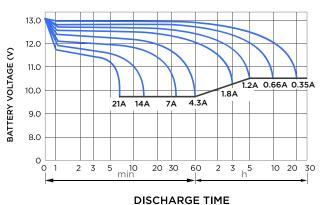
0.1

10

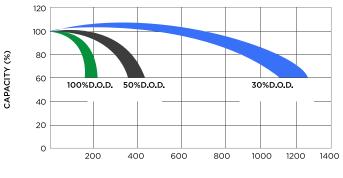
20

LIFE (YEARS)

## Discharge characteristic (25°C)



## Cycle service life in relation to depth of discharge



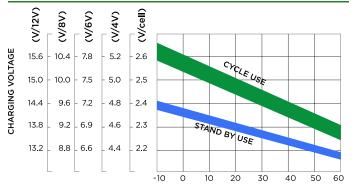
NUMBER OF CYCLES (CYCLES)

# **Relationship between charging voltage** and temperature

30

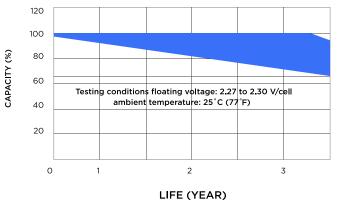
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TEMPERATURE (°C)

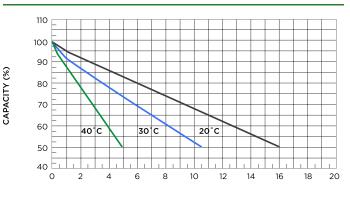


AMBIENT TEMPERATURE (°C)

#### Life characteristics of standby use

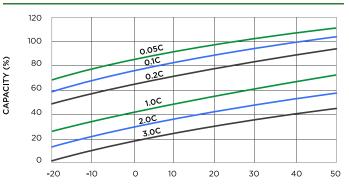


# Self-discharge characteristic



#### STORAGE TIME: MONTHS

#### Temperature effects on capacity



TEMPERATURE (°C)

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