

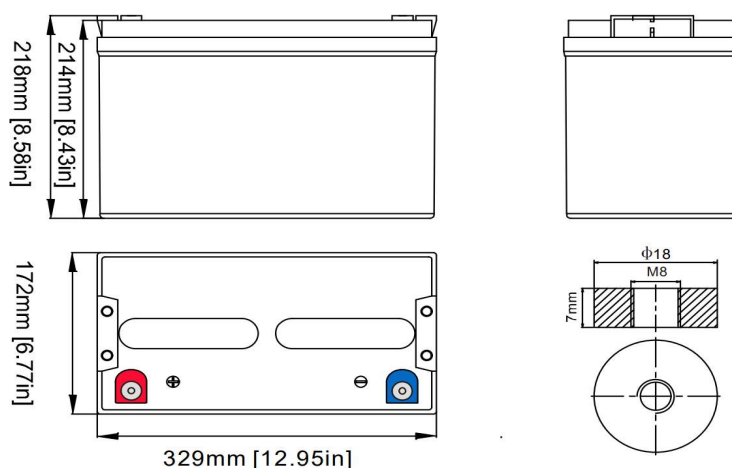
GFM series is a valve regulated AGM-GEL battery applying high purity lead with rare earth grid alloy and 4BS nucleation technique to promote the security and reliability of the battery. Fumed silica gel electrolyte improve part of the electrolyte comparing with AGM battery when operated on float use. High consistency and high quality of production procedures provide excellent performance with long life in all applications, Telecom, UPS and other backup power applications.

SPECIFICATION

Nominal Voltage				12V (6 cells)	
Nominal Capacity					
20-HR. to 10.8V		10-HR to 10.8V		5-HR to 10.8V	
3-HR to 10.8V		1-HR to 10.5V			
110Ah		100Ah		86.1Ah	
76Ah		59.2Ah			
Approximate Net Weight				29.3 kg (64.6 lbs)	
Internal Resistance (approx.)				<5.5 milliohms	
Max. Charging Current				25A	
Charging voltage				Equalize: 14.4V @25°C(77°F)	
				Standby: 13.5V @25°C(77°F)	
Terminal				M8-Φ18	
Operating Temp. Range				-35°C to 60°C(-31°F~140°F)	
Advice Operating Temp.				15°C~25°C(59°F~77°F)	
Self Discharge					
1 month				97%	
3 month				91%	
6 month				83%	
AEG GFM series's self discharge <3%/month at 25°C(77°F). The storage period may up to 6 months at 25°C(77°F) and then a freshening charge is required.					
Case and cover				A.B.S. UL94-V0 Optional.	
Design Life time				10-12 years	

FEATURE

- Long design life: the designed life at the temperature of 25°C(77°F) attains to 10~12 years
- Super discharge characteristics ensures reliable performance in UPS and telecommunication applications
- High consistency of capacity: excellent production and intelligent technology, high consistency of the battery
- Excellent over discharge recovery capability
- Valve regulated, maintenance free, non-spillable
- High discharge performance, low internal resistance

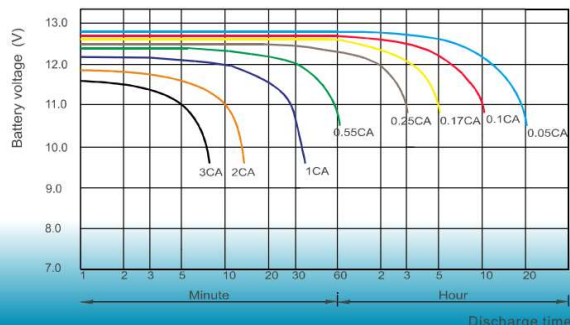


CONSTANT CURRENT DISCHARGE (UNIT: A)

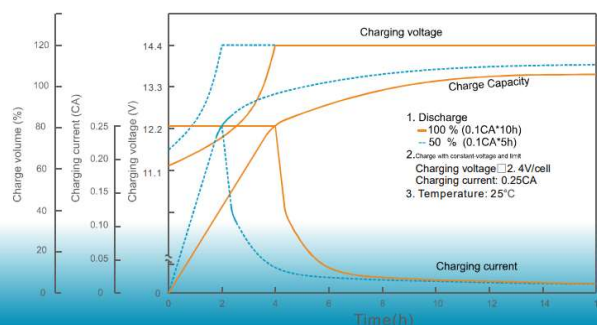
CONSTANT POWER DISCHARGE (UNIT: W/CELL)

15min	30min	1hr	2hr	3hr	4hr	5hr	6hr	8hr	10hr	20hr	F.V Time	15min	30min	1hr	2hr	3hr	4hr	5hr	6hr	8hr	10hr	20hr
121.50	84.22	52.50	29.00	23.11	18.78	16.33	14.22	11.56	9.80	5.10	1.85V	228.70	168.80	98.00	70.50	54.30	42.00	36.30	31.10	23.80	19.80	10.40
141.40	93.90	55.80	32.00	25.33	20.33	17.22	15.11	11.89	10.00	5.49	1.80V	262.00	178.50	103.80	71.30	54.80	42.60	36.50	31.40	24.60	20.10	10.50
152.60	98.00	59.20	33.67	25.82	20.59	17.32	15.25	11.98	10.10	5.65	1.75V	277.80	186.60	105.00	71.70	55.10	43.00	36.70	31.60	25.00	20.20	10.60
160.90	99.20	61.80	34.33	26.70	21.03	17.87	15.58	12.21	10.20	5.69	1.70V	285.80	194.80	106.90	72.10	55.80	43.20	37.00	31.80	25.30	20.40	10.70
164.80	100.70	64.20	34.85	26.93	21.28	18.13	15.74	12.27	10.26	5.74	1.67V	289.70	199.30	108.80	73.50	56.70	43.50	37.70	32.00	25.50	20.50	10.80

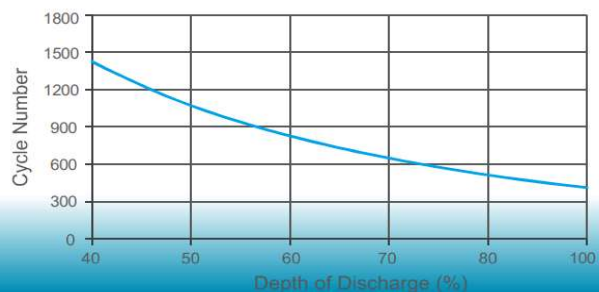
Discharging Curve (25°C)



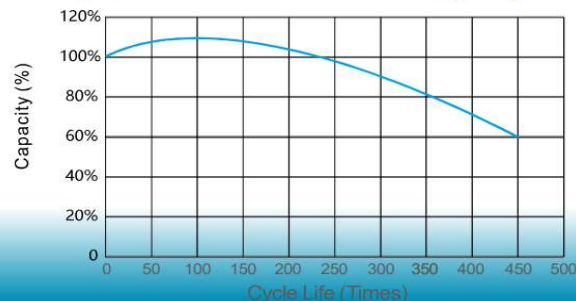
Charging Curve (25°C)



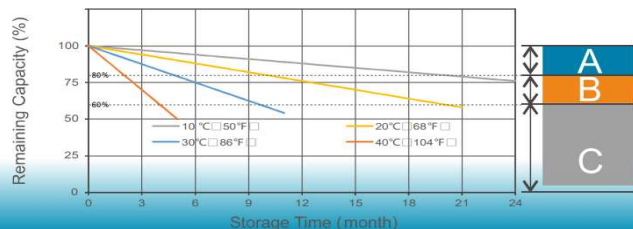
Cycle Life Vs Depth of Discharge



Cycle Life Vs Remaining Capacity

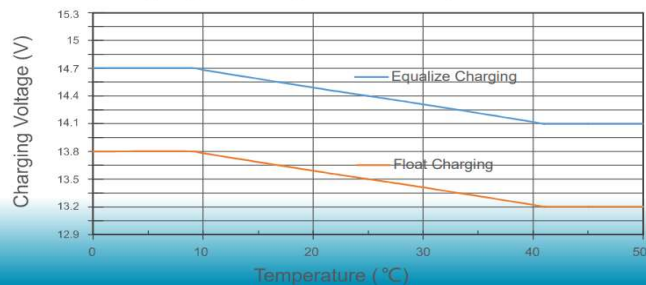


Self Discharge Characteristics



- A** Charging is not necessary unless 100% of capacity is required.
- B** Charging before use is necessary to help recover full capacity.
- C** Charging may fail to restore full capacity. Do not let batteries reach this state.

Charging Voltage Vs Temperature



Equalize Charging: Apply constant voltage charge 14.4V at 25°C (77°F). Initial charging current should be set at less than 0.25C Amps. Switch to float charge to avoid overcharging.

Float Charging: Apply constant voltage charge of 13.5V at 25°C (77°F).

Temperature Compensation: Charging Voltage for both Cyclic and Standby applications should be regulated in relation to ambient temperature. As temperature rises charging voltage should be reduced to prevent overcharge and increased as temperature falls to avoid undercharge. 3 mV/cell/°C.



APPLICATION

A whole range of CYCLIC applications including but not limited to:

- UPS/EPS
- Data Center
- Telecom
- Floating operation
- Emergency Power Supplier

