

GB series product is the general Valve Regulated Lead Acid battery with AGM technology. GB series batteries have are widely applied to energy reservation system, traction system, starting devices, emergence system and so on.

Application

- Lighting system
- Security system
- Electric toy
- Medical equipment
- Telecommunication system
- Power systems
- UPS
- Electric tools

General Features

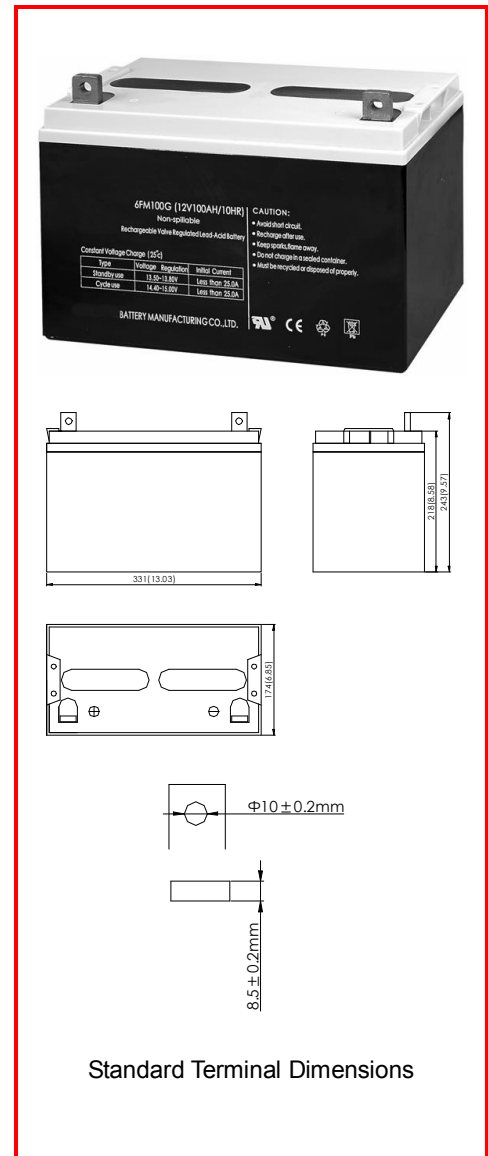
- Maintenance free
- Convenient for installation
- Safety and no leakage
- UL approval
- Excellent recharge and discharge performance
- Low self-discharge rate

Battery Construction

● Component	Material
● Positive plate	Lead dioxide
● Negative plate	Lead
● Container	ABS
● Cover	ABS
● Safety valve	Rubber
● Terminal	Copper
● Separator	AGM glass
● Electrolyte	Sulfuric acid

General Specifications

Battery Model	6FM100G/B (12V100AH/10HR)			
Designed Service Life	5 years			
Capacity (25°C)	20HR (5.25A)	10HR (10A)	5HR (17A)	1HR (55 A)
	105AH	100AH	85 AH	55 AH
Dimension: mm (inch)	Length	Width	Height	Total Height
	331(13.03)	174 (6.85)	218 (8.58)	243 (9.57)
Approx. Weight	27.5 (60.6 lbs)±5%			
Internal Resistance	Fully charged at 25°C: 0.005 Ohm			
Self-discharge	3% of capacity declined per month at 25°C			
Capacity Affected by Temp. (20HR)	40°C	25°C	0°C	-15°C
	105%	100%	85%	65%
Charge Voltage (25°C)	Cycle use		Stand-by use	
	14.4-15.0V(-24mV/°C), max. Current: 25A		13.5-13.8V (-18mV/°C)	



Constant Current Discharge Data

Constant Current Discharge Data Sheet (Amperes at 25°C)

End Voltage/cell	Minute (s)				Hour (s)				
	5	10	15	30	1	3	5	10	20
1.80	225	173	150	94.5	60.7	24.1	17.2	9.50	4.92
1.75	255	188	161	96.5	61.6	24.8	17.6	9.70	5.00
1.70	284	202	173	100	62.7	25.4	18.0	9.90	5.07
1.65	312	218	182	104	63.7	25.9	18.3	10.1	5.13
1.60	340	233	192	107	64.8	26.5	18.6	10.3	5.18

Constant Power Discharge Data

Constant Power Discharge Data Sheet (Watts at 25°C)

End Voltage/cell	Minute (s)					Hour (s)			
	5	10	15	30	45	1	2	3	5
1.80	418	324	294	178	134	118	68.0	48.5	34.7
1.75	459	346	305	184	137	122	68.6	49.4	35.1
1.70	498	365	316	190	140	126	69.9	50.0	35.3
1.65	539	386	327	196	143	127	71.2	50.6	35.5
1.60	579	406	332	202	147	129	72.5	51.1	35.7

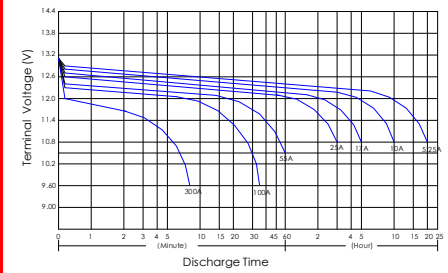
End Voltage

Discharge Rate	Discharge Current	End Voltage (V/cell)
10h	0.1C ₁₀ A (I ₁₀)	1.75
3h	0.25C ₁₀ A (I ₃)	1.75
1h	0.55C ₁₀ A (I ₁)	1.60

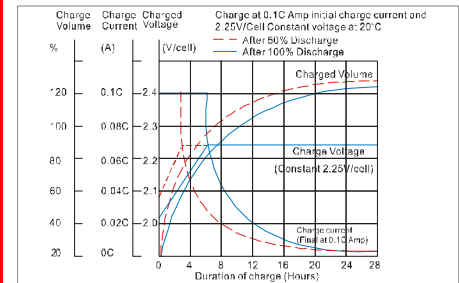
Storage Time VS Charge Time

Storage Time	Top up Charging Recommendation
Less than 6 months from production or previous top up charge	Maximum of 16 hours at a constant voltage of 2.40VPC
Less than 12 months from production or previous top up charge	Maximum of 20 hours at a constant voltage of 2.40VPC
Less than 6 months from production or previous top up charge	Maximum of 8 hours at a constant current of 0.1 C A
Less than 12 months from production or previous top up charge	Maximum of 10 hours at a constant current of 0.1 C A

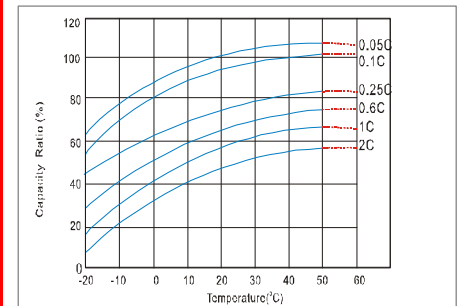
Performance Curves and Charts



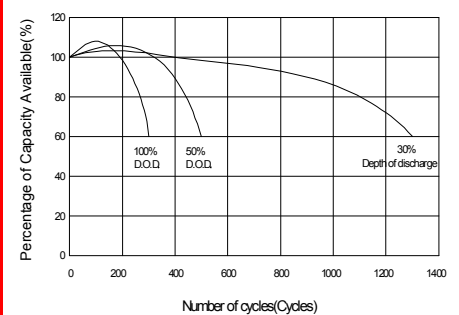
Discharge Characteristic (25°C)



Charge Characteristic (25°C)



Effect of temperature on capacity



Number of cycles Vs. Depth of Discharge

NOTE: This information is generally descriptive only and is not intended to make or imply any representation, guarantee or warranty with respect to any cells and batteries. Cell and battery designs/specifications are subject to modification without notice. Contact Long Way for the latest information.

