

GEL Series Battery

GE series batteries are designed with AGM separator and GEL deep cycle technology to give Extra-durable cyclic performance at extreme temperature. GE series Batteries are designed for 12 years life time floating design life at 25°C. Meet with IEC, BS, JIS and Eurobat standard

Application

- Emergency Power System
- Communication equipment
- Telecommunication systems
- Uninterruptible power supplies
- Electric toy car and wheelchairs, etc.
- Power tools
- Alarm system
- Marine equipment
- Medical equipment
- Fire and Security System

Specification

Nominal Voltage	12V		
Rated capacity (10 Hour rate)	55Ah		
Cells Per battery	6		
Dimensions (mm), L*W*H	230mm *138mm *210mm, Total Height: 215mm		
Approx Weight	15.3kg ± 3%		
Capacity @ 25°C: 10 hour rate (5.5A, 10.5V), 5 hour rate (9.78A, 10.5V), 3 hour rate (14.22A, 10.8V), 1 hour rate (33A, 9.6V)	55Ah	42.66Ah	48.9Ah
Max. discharge current	550A (5 Sec.)		
Internal Resistance	Full charged at 25°C: Approx 7.2mΩ		
Capacity affected by Temp.(10 HR)	40°C (102%)	25°C (100%)	0°C (85%) -15°C (65%)
Self Discharge @25°C: After 3 months storage 91% , After 6 months storage 82%, After 12 months storage 64%			
Charge method @25°C:	Cycle Use 14.40-15.00V (Initial charging current less than 16.5A)		
	Float Use 13.60-13.80V		

General Features

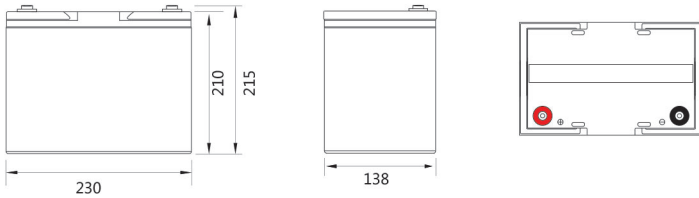
- Safety Sealing
- Non-spillable construction
- High Reliability and Stability
- Sealed and Maintenance-free
- Safety and Quality certification
- Long Life and low self-discharge design

Construction

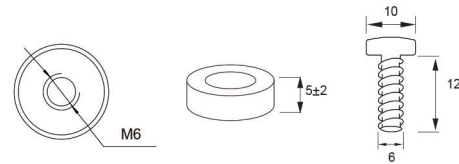
Positive	Lead dioxide
Negative Lead	Lead
Electrolyte	Sulfuric acid thixotropic Gel
Safety Valve	EPDR
Separator	Macromolecule polymer
Terminal	Copper
Container	ABS(UL94-HB), Flammability Resistance of UL94-V2 can be available upon request

Date: May 2023

Outer dimension (mm)



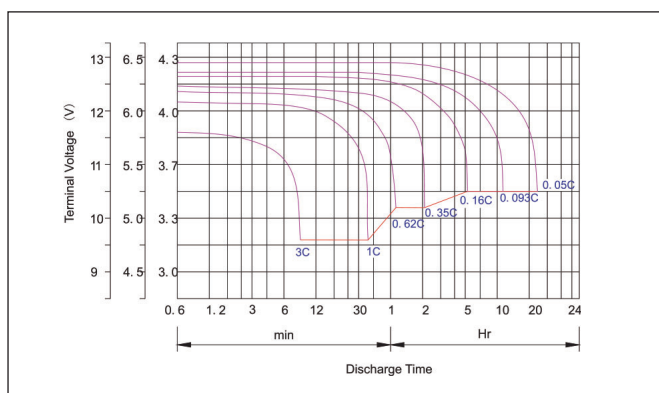
Terminal Type (mm)



Constant Current(A) and Constant Power(W) Discharge Table @ 25°C

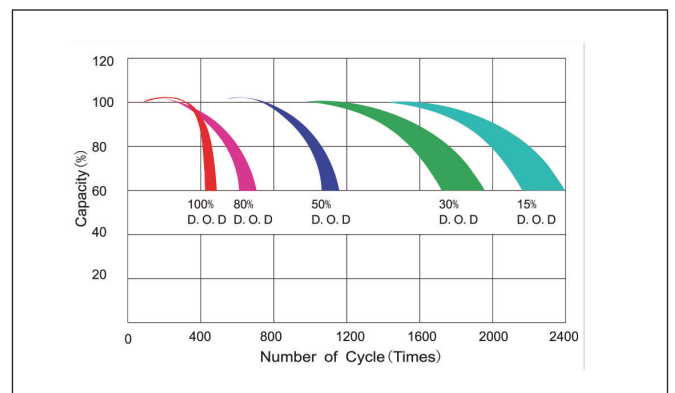
F.V/time	15MIN	30MIN	60MIN	90MIN	2HR	3HR	5HR	8HR	10HR	20HR
1.60V	96.500	57.600	33.000	24.152	20.360	14.503	9.897	7.008	5.707	3.176
	186.245	114.739	65.835	48.225	40.736	29.018	19.803	14.022	11.419	6.354
1.67V	91.487	56.369	32.761	23.913	20.258	14.427	9.843	6.949	5.618	3.017
	176.708	112.344	65.362	47.759	40.567	28.918	19.730	13.933	11.265	6.049
1.70V	89.231	55.877	32.522	23.889	20.208	14.390	9.840	6.879	5.547	2.937
	172.484	111.366	64.964	47.730	40.483	28.853	19.730	13.800	11.128	5.891
1.75V	85.471	54.892	32.043	23.578	20.081	14.300	9.788	6.860	5.500	2.890
	165.387	109.484	64.167	47.157	40.222	28.686	19.635	13.772	11.041	5.802
1.80V	81.962	53.662	31.804	23.411	19.954	14.224	9.761	6.801	5.411	2.795
	158.843	107.077	63.768	46.939	39.976	28.547	19.590	13.663	10.871	5.615
1.85V	77.701	52.185	31.326	23.148	19.777	14.097	9.707	6.712	5.323	2.699
	150.741	104.205	62.903	46.527	9.638	28.321	19.500	13.499	10.704	5.429

Discharge characteristic Curve



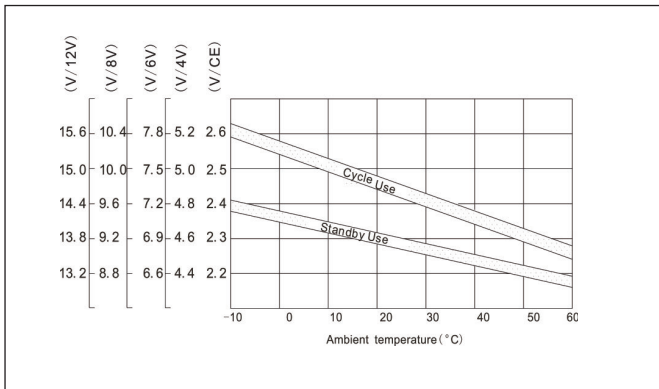
Cycle service Life

in relation to depth of discharge



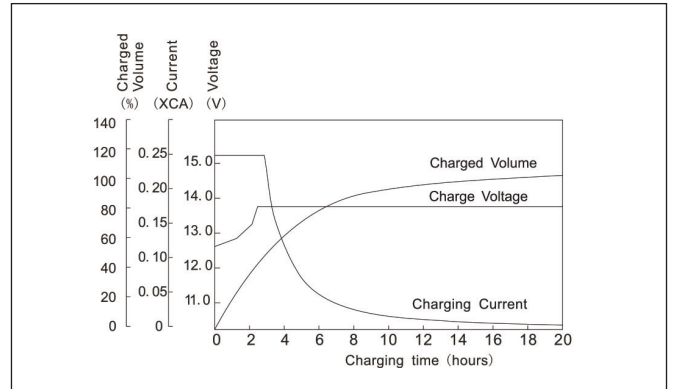
Date: May 2023

Relationship charging voltage/temp.

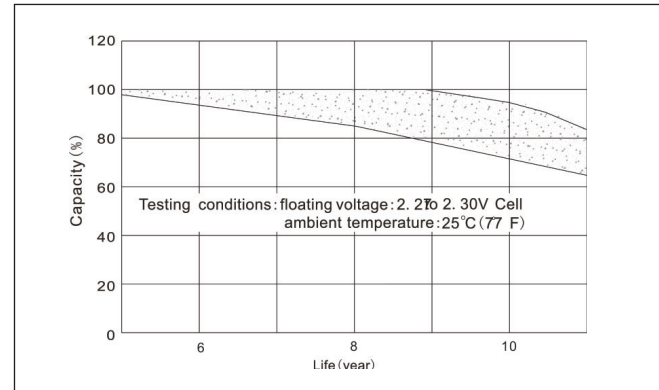


Constant voltage charge characteristic

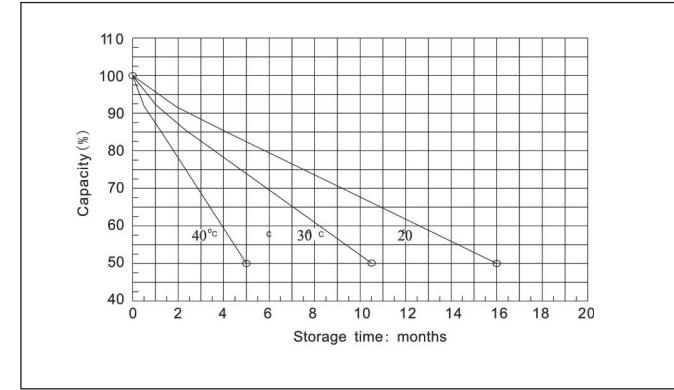
0,25CA, at 25°C



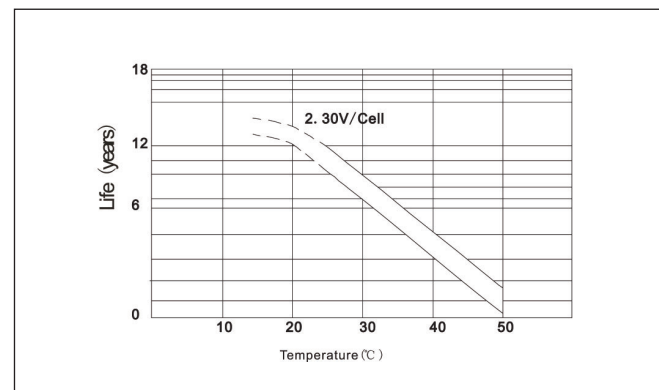
Life characteristic of standby use



Self-discharge characteristic

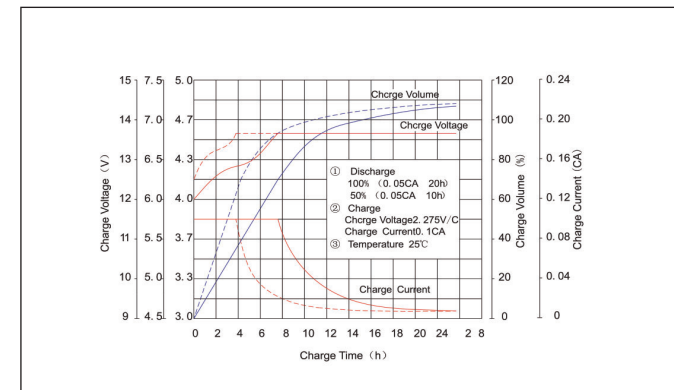


Temperature effects of float life



Charge characteristic Curve

for standby use



Note: The above datas are average values. (Edition 2020-05)

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