

Overview

Gel battery shows some distinctive advantages over flooded battery or AGM battery, such as super thermal stability, high deep discharge capability, good recovery from deep discharge, even if the battery is left discharged for three days, it will recover to 100% of capacity. With the above-mentioned advantages, the gel battery has long service life, specially suitable for motive power applications, such as golf trailer, srubber, folklift, etc. The deep discharge cycles increased 50% as compared with the AGM battery.



Battery Construction

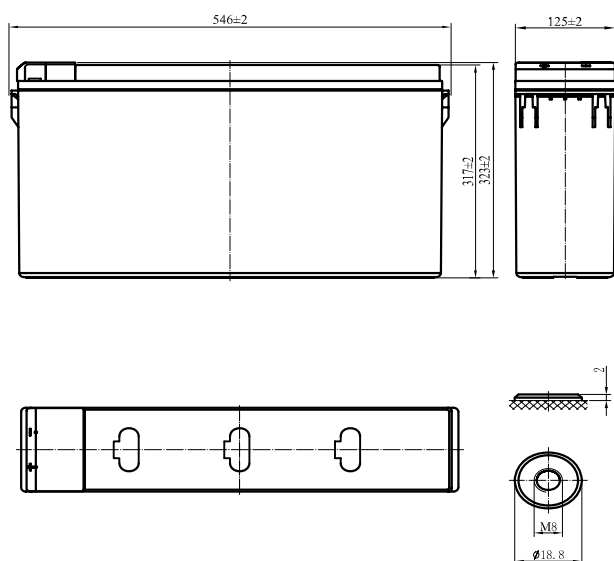
Component	Positive plate	Negative plate	Container	Cover	Safety valve	Terminal	Separator	Electrolyte
Raw material	Lead dioxide	Lead	ABS	ABS	Rubber	Copper	PE	Gelled acid

General Features

- Nanometer SiO₂ and H₂SO₄ gelled electrolyte technology for efficiency 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.
- 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.
- Case and cover available in both standard and flame retardant ABS.

Dimensions and Weight

Length(mm / inch)	546 / 21.5
Width(mm / inch)	125 / 4.92
Height(mm / inch)	317 / 12.5
Total Height(mm / inch)	323 / 12.7
Approx. Weight(Kg / lbs)	≥ 51 / 112.4



Battery Specification

Performance Characteristics	
Nominal Voltage	12V
Number of cell	6
Design Life	12years
Nominal Capacity 77°F(25°C)	
10 hour rate (15.0A, 10.8V)	150Ah
5 hour rate (24.6A, 10.5V)	123Ah
1 hour rate (95.1A, 9.6V)	95.1Ah
Internal Resistance	
Fully Charged battery 77°F(25°C)	≤5.5 mOhms
Self-Discharge	
3% of capacity declined per month at 25°C(average)	
Operating Temperature Range	
Discharge	-20~60°C
Charge	-10~60°C
Storage	-20~60°C
Max. Discharge Current 77°F(25°C)	1050A(5s)
Charge Methods: Constant Voltage Charge 77°F(25°C)	
Cycle use	2.40-2.45VPC
Maximum charging current	48A
Temperature compensation	-30mV/°C
Standby use	2.20-2.30VPC
Temperature compensation	-20mV/°C

Discharge Constant Current (Amperes at 77°F25°C)

End Point	10min	15min	30min	45min	1h	3h	5h	10h
Volts/Cell								
1.60V	317	259	155	---	95.1	38.9	25.5	15.3
1.65V	303	251	152	---	93.2	38.5	25.3	15.3
1.70V	286	241	148	---	90.8	38.2	24.9	15.2
1.75V	269	230	144	---	89.1	37.8	24.6	15.1
1.80V	251	218	139	---	87.5	37.3	24.0	15.0

Discharge Constant Power (Watts at 77°F25°C)

End Point	10min	15min	30min	45min	1h	3h	5h	10h
Volts/Cell								
1.60V	473	420	283	---	187	73.3	51.2	28.9
1.65V	451	406	279	---	183	72.6	50.8	28.7
1.70V	426	391	275	---	178	71.9	50.2	28.5
1.75V	409	375	270	---	172	71.1	49.6	28.3
1.80V	382	358	264	---	165	70.2	49.0	28.1

(Note) The above characteristics data are average values obtained within three charge/discharge cycles not the minimum values. All data shall be changed without notice, Vision reserves the right to explain and update the information contained hereinto.

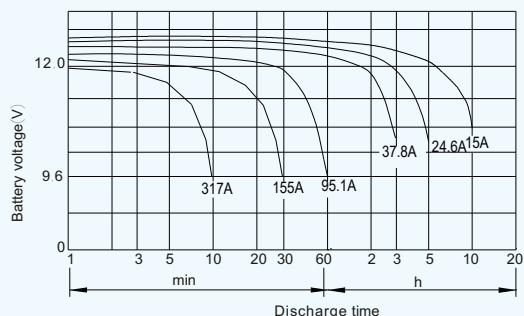


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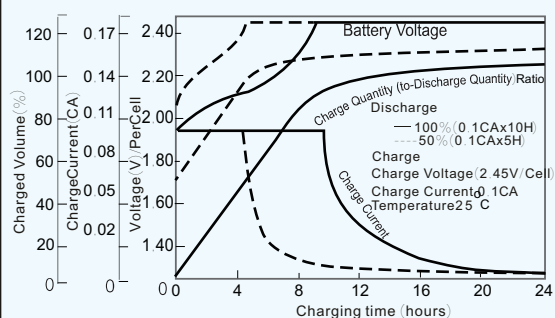
CGT12-150PEXV

12V 150Ah(10hr)

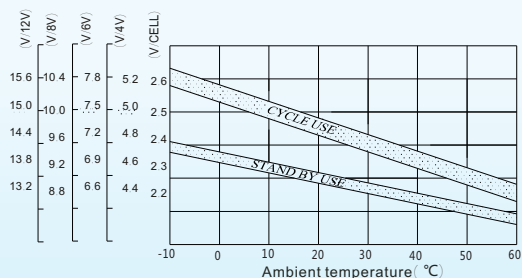
Discharge characteristic (25°C)



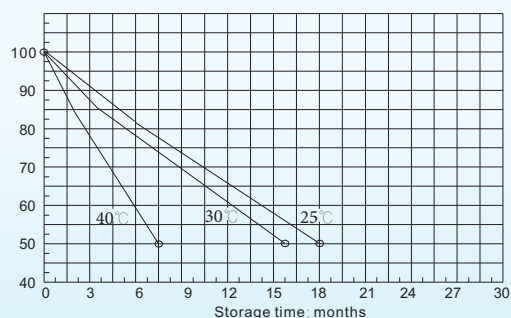
Charging characteristic for Cycle use



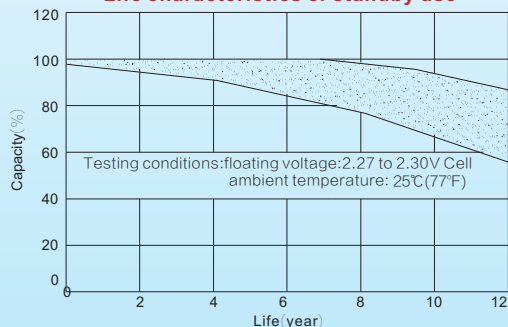
Relationship between charging voltage and temperatur



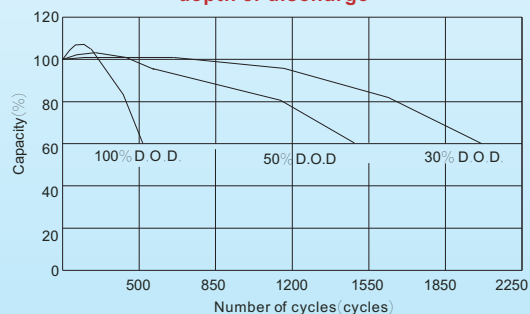
Self-discharge characteristic



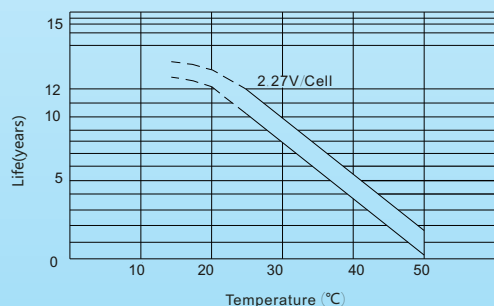
Life characteristics of standby use



Cycle service life in relation to depth of discharge



Temperature effects on float life



Temperature effects on capacity

