

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	Fiberglass	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.

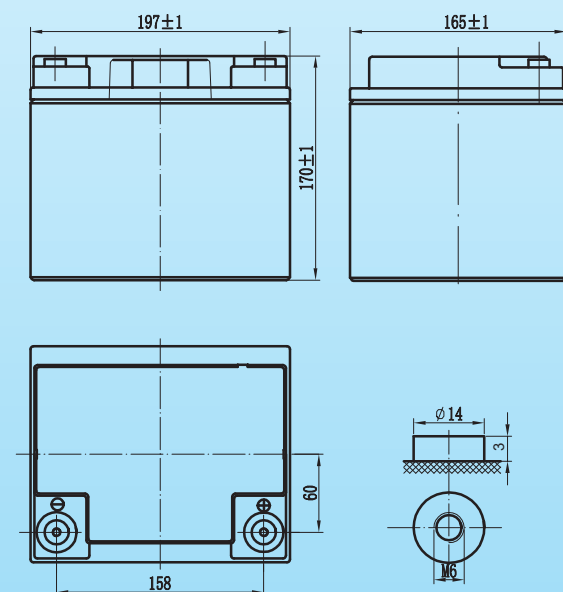
Battery Specification

Performance Characteristics	
Nominal Voltage	12V
Number of cell	6
Nominal Capacity 77°F(25°C)	
20 hour rate (2.0A, 10.5V)	40Ah
10 hour rate (3.66A, 10.5V)	36.6Ah
5 hour rate (6.7A, 10.5V)	33.5Ah
1 hour rate (25.3A, 9.6V)	25.3Ah
Internal Resistance	
Fully Charged battery 77°F(25°C)	≤9.5mOhms
Self-Discharge	
3% of capacity declined per month at 20°C (average)	
Operating Temperature Range	
Discharge	-20~60°C
Charge	-10~60°C
Storage	-20~60°C
Max. Discharge Current 77°F(25°C)	400A(5s)
Short Circuit Current	900A

Dimensions and Weight

Length(mm / inch)	197 / 7.75
Width(mm / inch)	165 / 6.49
Height(mm / inch)	170 / 6.69
Total Height(mm / inch)	170 / 6.69
Approx. Weight(Kg / lbs)	14.7 / 29.8

* Weight deviation: ± 3%



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

End Point										
Volts/Cell	5min	10min	15min	30min	1h	3h	5h	10h	20h	
1.60V	131	89.0	72.4	40.7	25.3	10.4	7.30	4.01	2.13	
1.65V	124	85.0	69.1	39.1	24.4	10.1	7.20	3.90	2.08	
1.70V	117	81.0	65.7	37.4	23.5	9.70	6.90	3.77	2.02	
1.75V	110	76.0	62.4	35.6	22.3	9.40	6.70	3.66	2.00	
1.80V	104	72.0	58.9	33.7	21.3	8.90	6.50	3.52	1.94	

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

End Point									
Volts/Cell	5min	10min	15min	30min	45min	1h	2h	3h	5h
1.60V	238	163	133	76.0	60.5	50.7	28.6	21.2	14.1
1.65V	226	156	128	73.0	58.6	49.2	27.8	20.6	14.0
1.70V	215	149	123	70.0	56.6	47.7	26.9	20.0	13.6
1.75V	203	142	117	67.0	54.3	45.7	26.0	19.4	13.2
1.80V	191	133	111	64.0	51.7	43.6	24.8	18.5	13.0

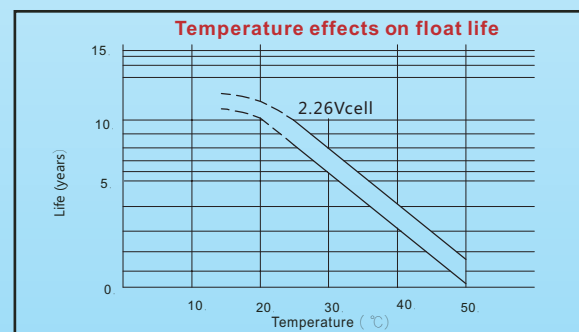
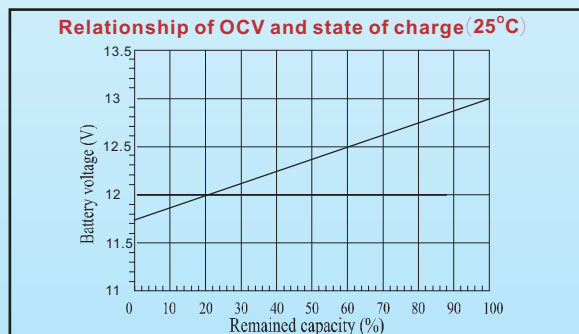
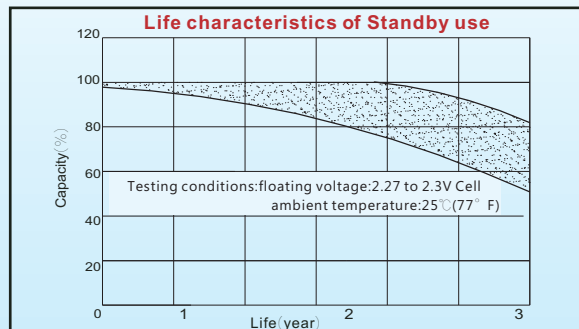
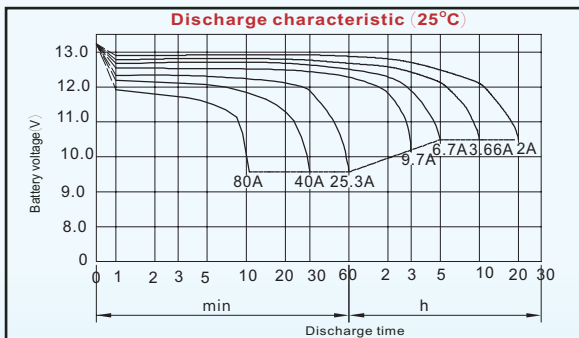
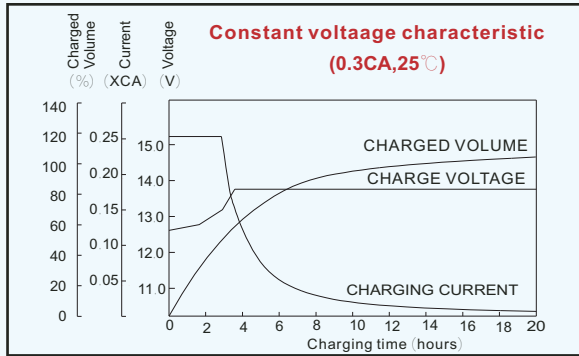
(Note) The above characteristics data are average values obtained within three charge/discharge cycles not the minimum values. All data shall be changed without notice, Vision reserves the right to explain and update the information contained hereinto.



VISION GROUP
Shenzhen Center Power
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CG12-40XA

12V 40Ah



CHARGING METHODS: Constant voltage charging at 25°C
 Standby use: No charging current limit is required
 Charging voltage: 2.20--2.30VPC
 Cyclic use: Maximum charging current: 30% of rated capacity
 Charging voltage: 2.40--2.45VPC
 Temperature compensation :
 stand by - 20mV/°C
 cyclic use -30mV/°C

