

TC12-150-G (12V150Ah/20hr)

Design Life: 12 years

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, sruubber, folklift, etc. The deep discharge cycles increased 50% as compared with the AGM battery.

Battery Construction

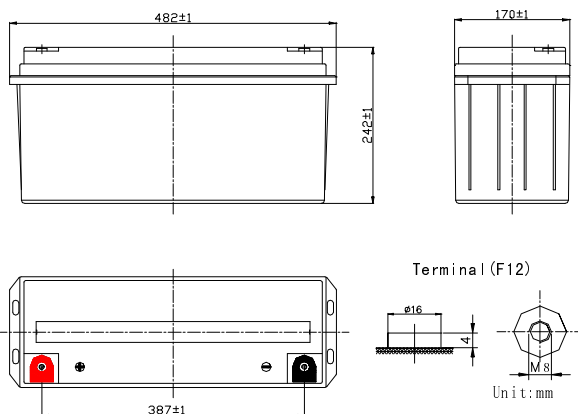
Component	Positive plate	Negative plate	Container	Cover	Safety valve	Terminal	Separator	Electrolyte
Raw material	Lead dioxide	Lead	ABS	ABS	Rubber	Copper	PVC	Gelled acid

General Feature

- 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.
- UL-recognized component.
- 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 restardant ABS.

SPECIFICATION

Nominal voltage 12V
 Number of cell 6
 Length(mm/inch) 482/19.0
 Width(mm/inch) 170/6.69
 Height(mm/inch) 242/9.53
 Total Height(mm/inch) 242/9.53
 Approx. Weight(kg/lbs) 44/96.8



Performance Characteristics

Capacity 77°F(25°C)	100 hour rate (1.66A、11.1V)	166Ah
	20 hour rate (7.5A、10.8V)	150Ah
	10 hour rate (13.8A、10.5V)	138Ah
	1 hour rate (87A、9.6V)	87Ah
Internal Resistance	Full charged Battery77°F(25°C):7mΩ	
Operating Temperature Range	Discharge: -20~60℃	
	Charge: -10~60℃	
	Storage: -20~60℃	
Self-Discharge 3% of capacity declined per month at 20℃(average)		
Max. discharge current77°F(25°C): 1000A(5S)		
Charge (Constant Voltage)	Float: 13.38~13.68 V/77° F/(25°C)	
	Cycle:14.28~14.52 V/77°F/(25°C) Max. Current: 37.5A	

Discharge Constant Current (Amperes at 77° F 25 °C)

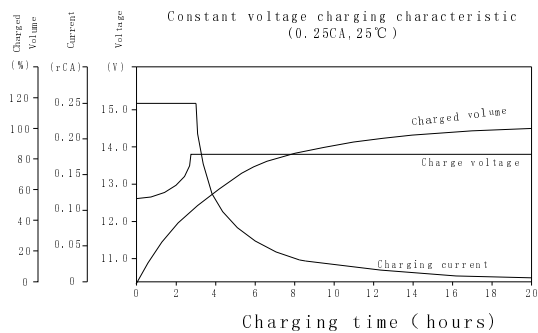
End Point Volts/Cell	5min	10min	15min	30min	1h	3h	5h	10h	20h
1.60V	381	308	252	146	87.0	36.9	25.0	14.3	7.60
1.65V	352	296	239	143	85.1	36.5	24.7	14.2	7.56
1.70V	330	278	228	138	83.0	36.0	24.5	14.0	7.52
1.75V	318	261	216	132	81.3	35.0	24.3	13.8	7.50
1.80V	286	250	205	126	79.2	33.7	23.8	13.3	7.46

Discharge Constant Power (watts at 77° F 25 °C)

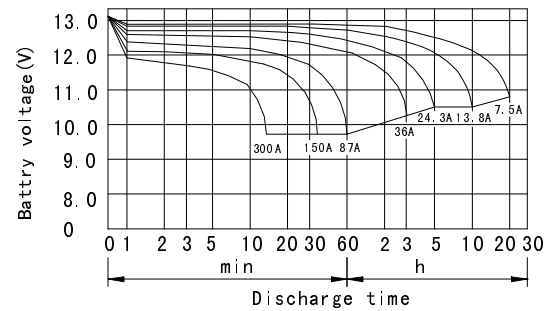
End Point Volts/Cell	5min	10min	15min	30min	45min	1h	2h	3h	5h
1.60V	697	545	448	292	201	182	103	71.6	48.8
1.65V	664	523	433	285	196	180	101	70.8	48.6
1.70V	622	500	420	275	192	177	98.7	69.9	48.2
1.75V	578	470	406	267	187	172	96.8	69.1	47.8
1.80V	536	439	393	258	183	168	95.0	68.1	47.3

(Note) The above characteristics data are average values obtained Within three charge/discharge cycles not the minimum values.

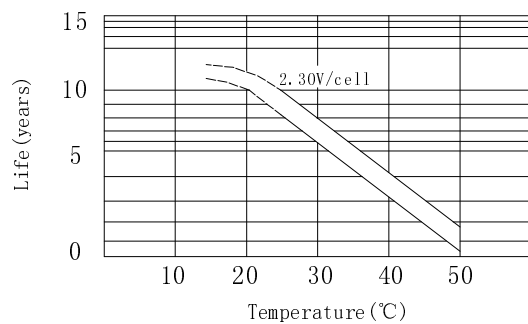
charge characteristic curve



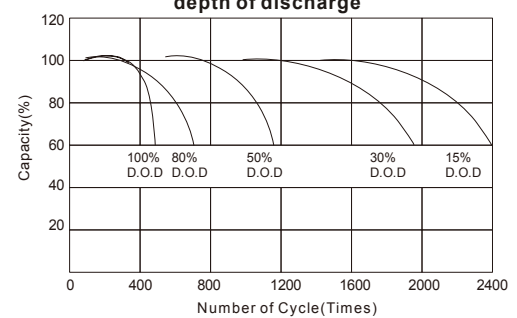
Discharge characteristic (25°C)



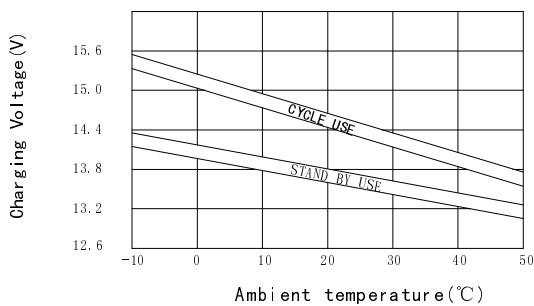
Temperature effects on float life



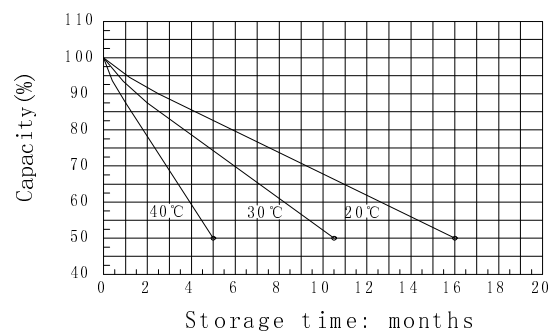
Cycle service life in relation to depth of discharge



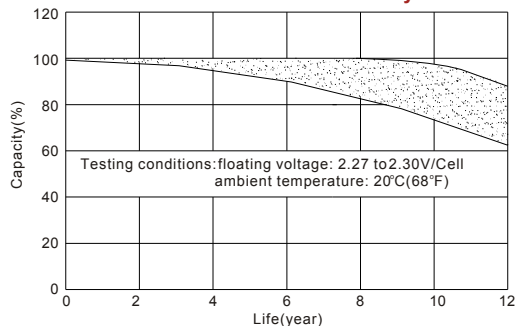
Relationship between charging voltage and temperature



Self-discharge characteristic



Life characteristics of standby use



Temperature effects on capacity

