

General Series Battery

JYC General (GP) Series VRLA batteries are designed with AGM (Absorbent Glass Mat) technology, high performance plates and electrolyte to give extra power output for common power backup system. GP Series Batteries are the general purpose batteries with 5 years floating design life at 25 °C meet with IEC, BS, JIS and Eurobat standard, UL(MH62092), CE approved.

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



General Features

- * Heavy Duty Grid
- * Mechanized assembly
- * Non-spillable construction
- * High Reliability and Stability
- * Sealed and Maintenance-free
- * Long Life and low self-discharge design

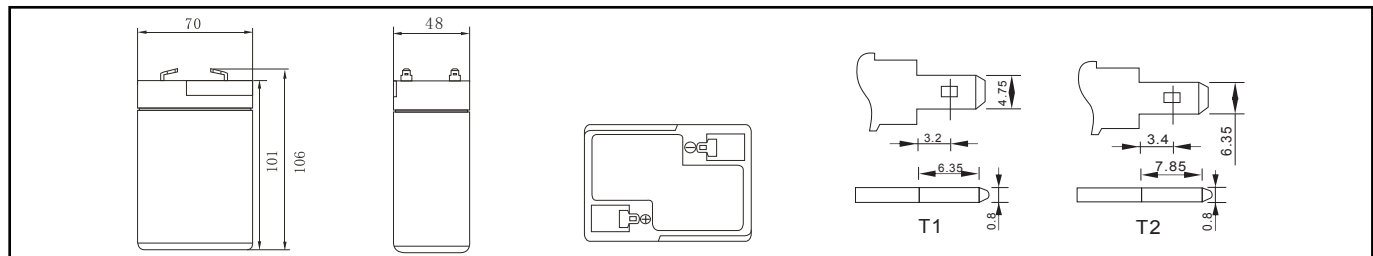
Construction

- * Positive Lead dioxide
- * Electrolyte Sulfuric acid
- * Separator Fiber glass
- * Container ABS(UL94-HB) / Flame Retardant ABS (UL94-V0)
- * Negative Lead
- * Safety Valve EPDR
- * Terminal Copper

Specification

Battery Model	Nominal Voltage			6V
	Rated capacity (20 Hour rate)			4.5Ah
	Cells Per battery			3
Dimension	Length	Width	Height	Total Height
	70mm (2.76 inches)	47mm (1.86 inches)	100mm (3.94 inches)	105mm (4.13 inches)
Approx Weight	0.68kg (1.5lbs) ± 3%			
Capacity @ 25°C (77°F)	20 hour rate(0.225A,5.25V)	10 hour rate(0.43A,5.25V)	5 hour rate(0.77A,5.25V)	1 hour rate(2.7A,4.8V)
	4.5Ah	4.3Ah	3.87Ah	2.70Ah
Max.discharge current	67.5A (5 Sec.)			
Internal Resistance	Full charged at 25°C (77°F) : Approx 20mΩ			
Capacity affected by Temp.(20 HR)	40°C (104°F)	25°C (77°F)	0°C (32°F)	-15°C (5°F)
	102%	100%	85%	65%
Self Discharge @25°C (77°F)	After 3 months storage		After 6 months storage	After 12 months storage
	91%		82%	64%
Charge method @25°C (77°F)	Cycle Use		Float Use	
	7.25-7.50V (Initial charging current less than 1.35A)		6.75-6.90V	

Outer dimension (mm)

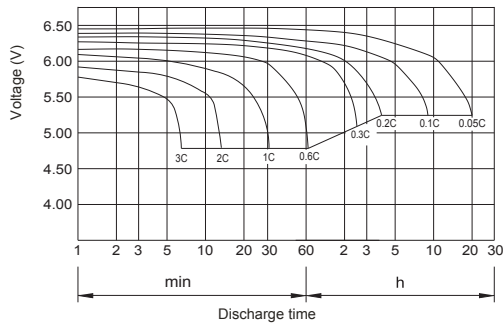


Terminal Type (mm)

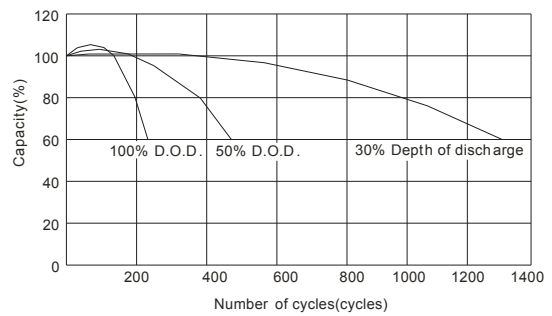
Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C (77°F)

	F.V/time	Constant Current (Amp)											
		5MIN	10MIN	15MIN	30MIN	60MIN	90MIN	2HR	3HR	5HR	8HR	10HR	20HR
A	1.60V	15.192	10.709	8.100	4.870	2.550	1.866	1.609	1.146	0.782	0.548	0.446	0.247
	1.67V	13.487	9.994	7.679	4.766	2.532	1.848	1.601	1.140	0.778	0.543	0.439	0.235
	1.70V	12.767	9.636	7.490	4.724	2.513	1.846	1.597	1.137	0.778	0.538	0.434	0.229
	1.75V	11.555	9.068	7.174	4.641	2.476	1.822	1.587	1.130	0.773	0.536	0.430	0.225
	1.80V	10.324	8.458	6.880	4.537	2.458	1.809	1.577	1.124	0.771	0.532	0.423	0.218
W	1.85V	9.092	7.848	6.522	4.412	2.421	1.789	1.563	1.114	0.767	0.525	0.416	0.210
	F.V/time	5MIN	10MIN	15MIN	30MIN	60MIN	90MIN	2HR	3HR	5HR	8HR	10HR	20HR
	1.60V	28.098	20.443	15.633	9.701	5.087	3.726	3.219	2.293	1.565	1.096	0.893	0.495
	1.67V	24.941	19.075	14.832	9.499	5.051	3.690	3.206	2.285	1.559	1.089	0.881	0.471
	1.70V	23.615	18.404	14.478	9.416	5.020	3.688	3.199	2.280	1.559	1.079	0.870	0.459
1.75V	21.374	17.323	13.882	9.257	4.958	3.644	3.178	2.267	1.552	1.077	0.863	0.452	
1.80V	19.100	16.164	13.333	9.053	4.928	3.627	3.159	2.256	1.548	1.068	0.850	0.437	
1.85V	16.827	15.004	12.653	8.810	4.861	3.595	3.132	2.238	1.541	1.055	0.837	0.423	

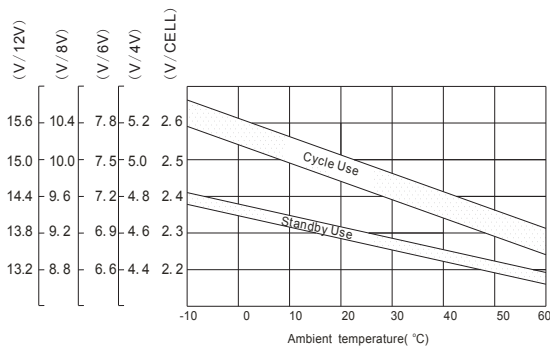
Discharge characteristic Curve



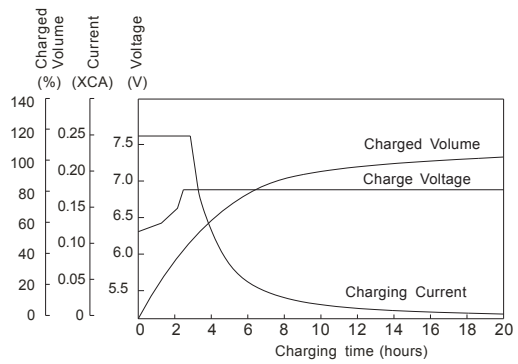
Cycle service life in relation to depth of discharge



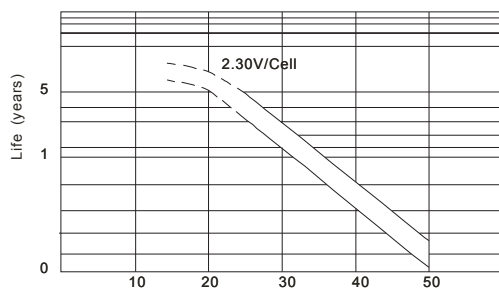
Relationship between charging voltage and temperature



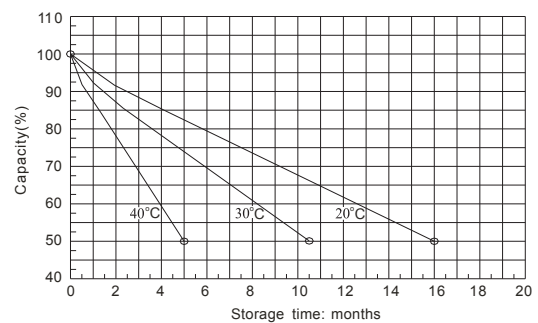
Constant voltage charging characteristic (0.25CA, at 25°C)



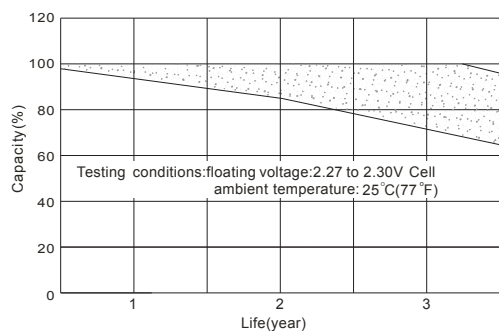
Temperature effects on float life



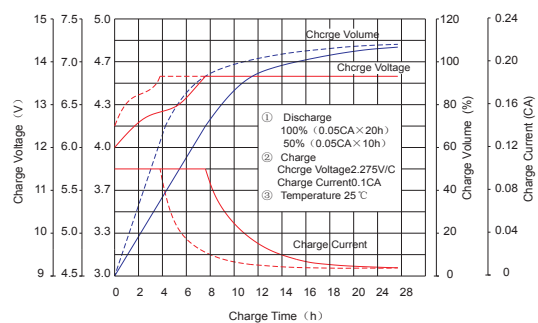
Self-discharge characteristic



Life characteristics of standby use



Charge characteristic Curve for standby use



● Storage and transportation:

- The storage battery must be fully charged.
- The battery should be stored in a low temperature, dry, clean, and well-ventilated environment.
- Avoid heat sources and direct sunlight.
- During the transportation of the battery, it is strictly forbidden to turn it upside down, or to carry it violently (causing the battery shell to break).
- Prolonged exposure to sunlight is strictly prohibited.
- It is strictly forbidden to get the packing box wet by rain.

● Maintenance:

- If the battery is stored for more than 3 to 6 months, it needs to be recharged once. For the battery that loses electricity due to various reasons during use, it should be charged in time to prevent the performance degradation caused by the sulfation of the battery.
- Check the vent on the top cover of the battery frequently to prevent it from being blocked by dust, ice water, etc., to prevent the shell from deforming and exploding.
- When the battery or the vehicle is not used for a long time, the battery should be fully charged before storage, otherwise the service life of the battery will be affected.

● Precautions:

- This battery is a lead-acid battery, which is highly corrosive. Keep away from children. Users should wear protective eyes and rubber gloves when handling the battery. Once the eyes, skin and clothes are splashed with sulfuric acid, rinse immediately with plenty of water. Seek medical attention immediately.
- The battery should be kept away from heat sources and open flames, and should be ventilated during charging and use, and be careful not to explode and injure people.
- When installing the battery, do not use metal tools to connect the positive and negative terminals, otherwise it will cause a short circuit, causing fire or explosion.
- When the battery is charged, please turn off the charging power supply first, and then remove the connection line between the charger and the battery, to prevent explosions and injuries.