

High Rate Series battery

JYC General (HR) 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. HR Series Batteries are the general purpose batteries with 10 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

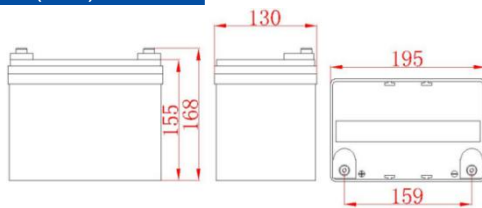
- * Positive Lead dioxide
- * Electrolyte Sulfuric acid
- * Separator Fiber glass
- * Container ABS(UL94-HB) / Flame Retardant ABS (UL94-V0)
- * Negative Lead
- * Safety Valve EPDR
- * Terminal Copper



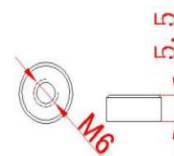
Specification

Battery Model	Nominal Voltage		12V	
	Rated capacity (10 Hour rate)		33Ah	
	Cells Per battery		6	
Dimension	Length	Width	Height	Total Height
	195mm (7.68inches)	130mm (5.12inches)	155mm (6.10inches)	168mm (6.14inches)
Approx Weight	9.75kg(21.5lbs) ± 3%			
Capacity @ 25°C (77°F)	20 hour rate(1.75A,10.5V)	10 hour rate(3.3A,10.5V)	5 hour rate(6.229A,10.5V)	1 hour rate(21A,9.6V)
	35Ah	33Ah	31.145Ah	21Ah
Max.discharge current	330A (5Sec.)			
Internal Resistance	Full charged at 25°C(77°F): Approx 8.8mΩ			
Capacity affected by Temp.(10HR)	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	
	14.40-14.70V (Initial charging current less than 9.9A)		13.50-13.80V	

Outer dimension (mm)



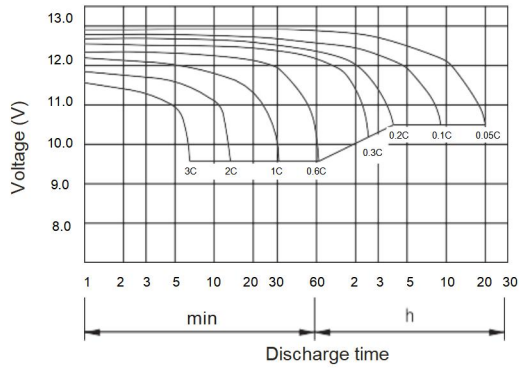
Terminal Type (mm)



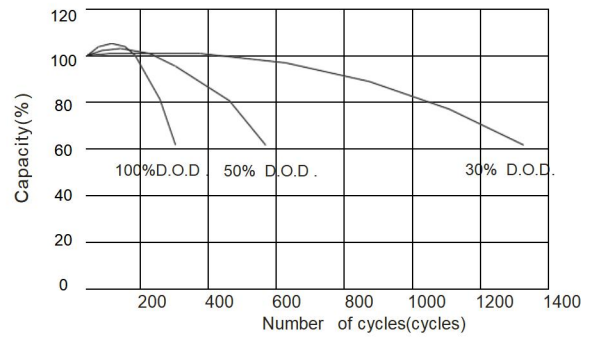
Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C (77°F)

	F.V/time	5MIN	10MIN	15MIN	30MIN	60MIN	90MIN	2HR	3HR	5HR	8HR	10HR	20HR
A	1.60V	118.800	78.664	59.500	36.960	21.000	15.370	12.956	9.229	6.298	4.205	3.424	1.923
	1.67V	105.468	73.409	56.409	36.170	20.848	15.217	12.892	9.181	6.264	4.169	3.371	1.827
	1.70V	99.839	70.782	55.018	35.854	20.696	15.202	12.859	9.157	6.262	4.128	3.328	1.778
	1.75V	90.359	66.609	52.700	35.223	20.391	15.004	12.779	9.100	6.229	4.116	3.300	1.750
	1.80V	80.731	62.127	50.536	34.433	20.239	14.898	12.698	9.052	6.212	4.081	3.247	1.692
	1.85V	71.102	57.645	47.909	33.485	19.935	14.730	12.585	8.971	6.177	4.027	3.194	1.635
	F.V/time	5MIN	10MIN	15MIN	30MIN	60MIN	90MIN	2HR	3HR	5HR	8HR	10HR	20HR
W	1.60V	219.726	150.167	114.835	73.624	41.895	30.688	25.923	18.466	12.602	8.413	6.851	3.848
	1.67V	195.037	140.121	108.955	72.087	41.594	30.392	25.816	18.402	12.555	8.360	6.759	3.663
	1.70V	184.668	135.193	106.350	71.460	41.341	30.374	25.762	18.361	12.555	8.280	6.677	3.567
	1.75V	167.140	127.251	101.975	70.252	40.833	30.009	25.596	18.255	12.495	8.263	6.625	3.513
	1.80V	149.364	118.733	97.939	68.708	40.580	29.870	25.439	18.167	12.467	8.198	6.523	3.400
	1.85V	131.589	110.215	92.944	66.865	40.029	29.608	25.224	18.023	12.409	8.099	6.422	3.287

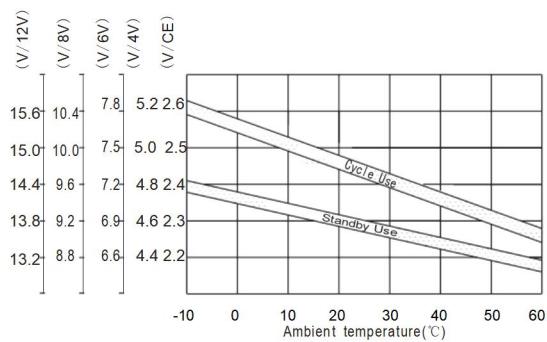
Discharge characteristic Curve



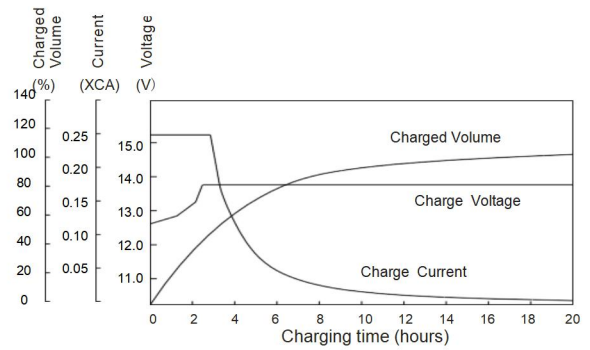
Cycleservice life in relation to depth of discharge



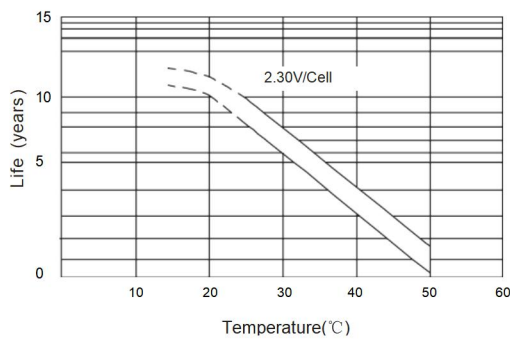
Relationship between charging voltage and temperature



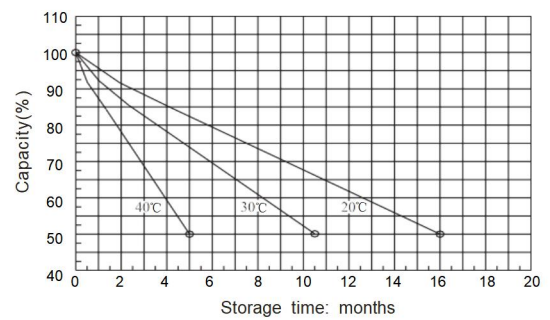
Constant voltage charging characteristic (0.25CA, at 25 °C)



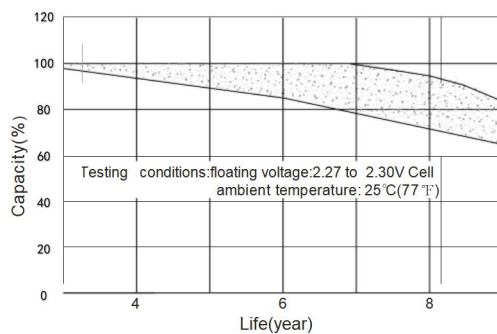
Temperature effects on float life



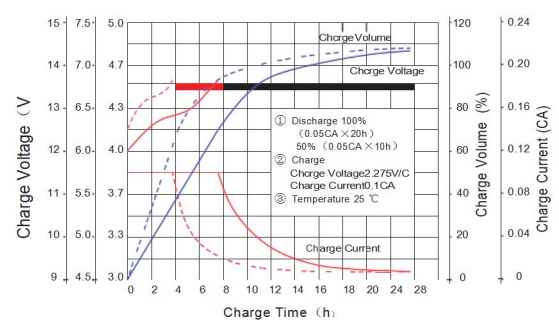
Self-discharge characteristic



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.