BEST EN BATTERY MANUFACTURER CO.,LTD.

BB-12V-9Ah (GEL)

GEL Series Battery

GE series batteries are designed with AGM separator and GEL deep cycle technology to give Extra-durable cyclic performance at extreme temperature.
GE series Batteries are designed for 12 years life time floating design life at 25℃.
Meet with IEC, BS,JIS and Eurobat standard .

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

* Safety Sealing
* Non-spillable construction
* High Reliability and Stability
* Sealed and Maintenance-free
* Safety and Quality certification
* Long Life and low self-discharge design

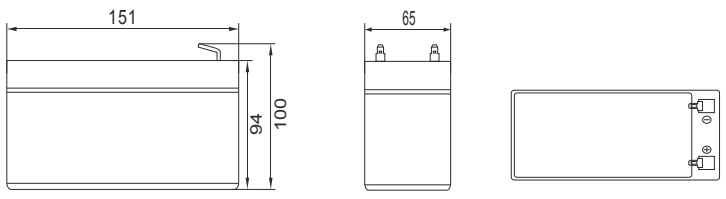
Construction

* Positive ..... Lead dioxide
* Electrolyte ..... Sulfuric acid thixotropic Gel
* Separator ..... Macromolecule polymer
* Container ..... ABS(UL94-HB), Flammability Resistance of UL94-V2 can be available upon request
* Negative ..... Lead
* Safety Valve ..... EPDR
* Terminal ..... Copper

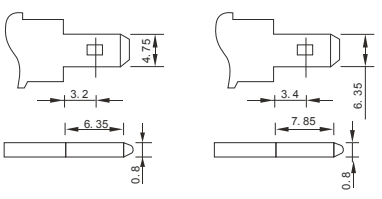
Specification

Battery Model	Nominal Voltage		12V	
	Rated capacity (20 Hour rate)		9.0Ah	
	Cells Per battery		6	
Dimension	Length	Width	Height	Total Height
	151mm (5.94 inches)	65mm (2.56 inches)	94mm (3.7 inches)	100mm (3.94 inches)
Approx Weight	2.35kg (5.18lbs) ± 3%			
Capacity @ 25℃ (77 ℉)	20 hour rate(0.45A,10.5V)	10 hour rate(0.85A,10.8V)	5 hour rate(1.60A,10.5V)	1 hour rate(5.3A,9.6V)
	9.0Ah	8.5Ah	8Ah	5.3Ah
Max.discharge current	120A (5 Sec.)			
Internal Resistance	Full charged at 25℃: Approx 20.5mΩ			
Capacity affected by Temp.(20 HR)	40℃ (104℉)	25℃ (77℉)	0℃ (32℉)	-15℃ (5℉)
	102%	100%	85%	65%
Self Discharge @25℃ (77 ℉)	After 3 months storage		After 6 months storage	After 12 months storage
	91%		82%	64%
Charge method @25℃ (77 ℉)	Cycle Use		Float Use	
	14.4-14.7V (Initial charging current less than 2.70A)		13.50-13.80V	

Outer dimension (mm)



Terminal Type (mm)

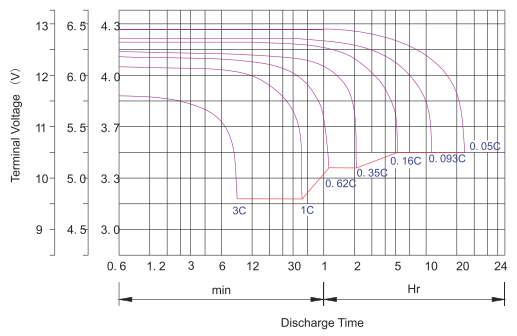


Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25℃ (77 ℉)

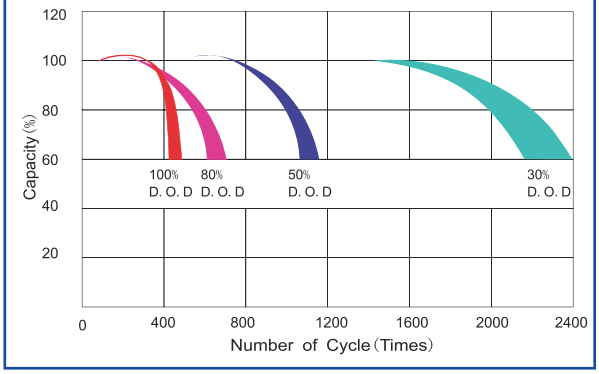
F.V/time	5MIN	10MIN	15MIN	30MIN	60MIN	90MIN	2HR	3HR	5HR	8HR	10HR	20HR
1.60V	35.120	22.608	17.100	9.600	5.300	3.879	3.332	2.373	1.620	1.109	0.903	0.501
	64.956	43.157	33.003	19.123	10.574	7.745	6.666	4.748	3.240	2.218	1.806	1.003
1.67V	31.179	21.097	16.212	9.395	5.262	3.841	3.315	2.361	1.611	1.099	0.889	0.476
	57.658	40.270	31.313	18.724	10.498	7.670	6.638	4.732	3.228	2.204	1.782	0.954
1.70V	29.515	20.342	15.812	9.313	5.223	3.837	3.307	2.355	1.610	1.088	0.877	0.463
	54.592	38.854	30.564	18.561	10.434	7.666	6.624	4.721	3.229	2.183	1.760	0.929
1.75V	26.712	19.143	15.146	9.149	5.146	3.787	3.286	2.340	1.602	1.085	0.870	0.456
	49.410	36.571	29.307	18.247	10.306	7.574	6.582	4.694	3.213	2.178	1.747	0.915
1.80V	23.866	17.855	14.524	8.944	5.108	3.760	3.265	2.328	1.597	1.076	0.856	0.441
	44.155	34.123	28.147	17.846	10.242	7.539	6.541	4.671	3.206	2.161	1.720	0.886
1.85V	21.019	16.567	13.769	8.697	5.031	3.718	3.236	2.307	1.588	1.062	0.842	0.426
	38.901	31.675	26.712	17.368	10.103	7.473	6.486	4.634	3.191	2.135	1.693	0.857

Note: The above datas are average values. (Edition 2020-05)

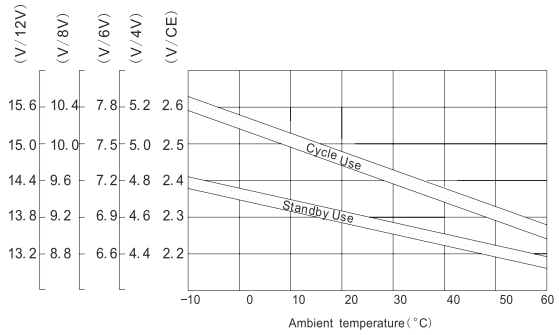
Discharge characteristic Curve



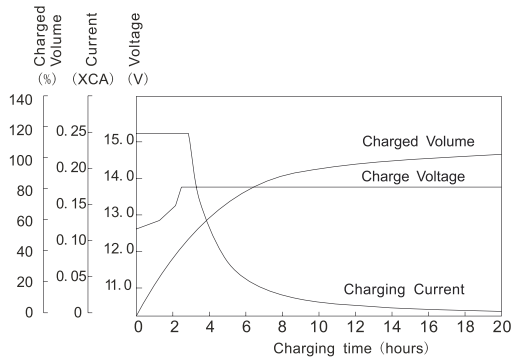
Cycle service life in relation to depth of discharge



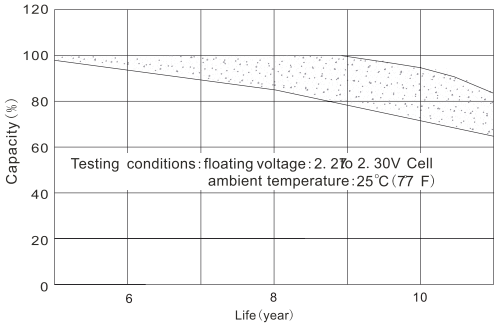
Relationship between charging voltage and temperature



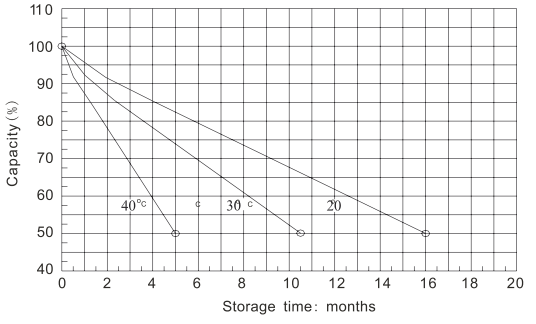
Constant voltage charging characteristic (0.25CA, at 25℃)



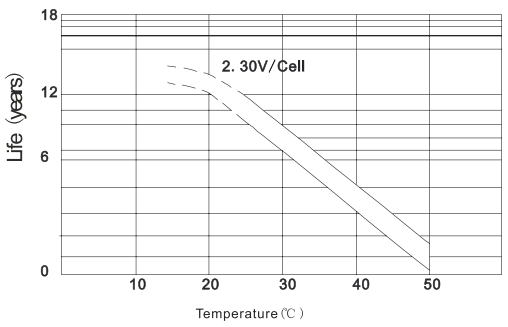
Life characteristics of standby use



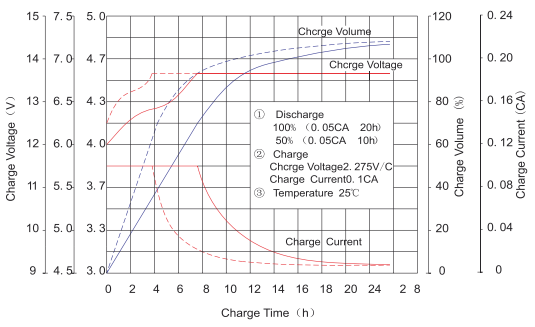
Self-discharge characteristic



Temperature effects on float life



Charge characteristic Curve for standby use



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