



● NPG GEL Series Battery

NPG Series batteries are designed with special separator and GEL deep cycle technology to give Extra-durable cyclic performance at extreme temperature.

NPG series Batteries are the DEEP CYCLE batteries with 12 years floating design life at 25°C.

Meet with IEC, BS, JIS and Eurobat standard.



● Application

- *Emergency Power System
- *Communication equipment
- *Telecommunication systems
- *Uninterruptible power supplies
- *Solar power and wind power systems
- *Power tools
- *Power station
- *Marine equipment
- *Fire and Security System
- *Electric vehicle and wheelchairs etc.

● General Features

- *Safety Sealing
- *Non-spillable construction
- *High Reliability and Stability
- *Sealed and Maintenance-free
- *Safety and Quality certification
- *Longer Life in deep cycle application

● Construction

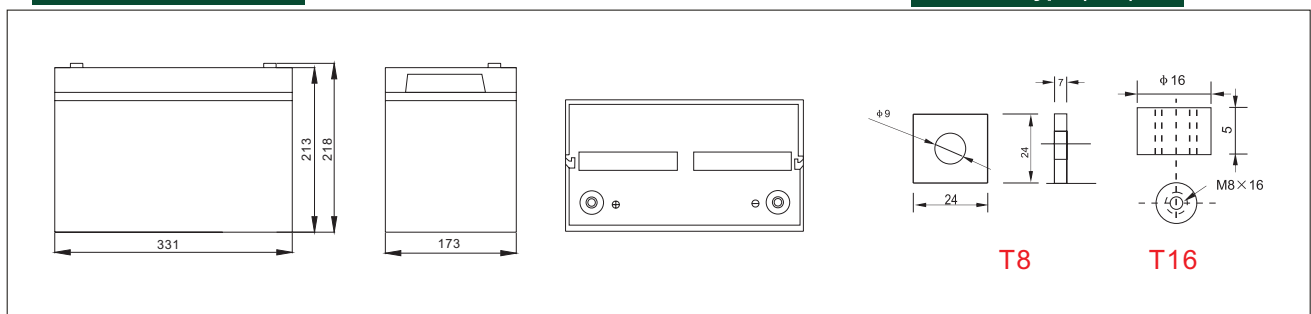
- *PositiveLead dioxide
- *ElectrolyteSulfuric acid thixotropic Gel
- *SeparatorMacromolecule polymer
- *ContainerABS(UL94-HB), Flammability Resistance of UL94-V2 can be available upon request
- *NegativeLead
- *Safety ValveEPDR
- *TerminalCopper

● Specification

Battery Model	Nominal Voltage		12V	
	Rated capacity (20 Hour rate)		100Ah	
Dimensions	Length	Width	Height	Total Height
	331mm (13.03 inches)	173mm(6.81 inches)	213mm(8.39 inches)	218mm (8.58inches)
Approx Weight	32.0kg(70.56lbs) ±3%			
Capacity 25°C (77°F)	20 hour rate (5A,10.8V)	10 hour (9.2A,10.5V)	5 Hour (17A,10.2V)	1 Hour (60A,9.6V)
	100Ah	92Ah	85Ah	60Ah
Max.discharge current	1000A(5 Sec.)			
Internal Resistance	Full charged at 25 °C: Approx 9mΩ			
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 at 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	
	14.10-14.40V (Initial charging current less than 36.8A)		13.50-13.80V	

● Outer dimensions (mm)

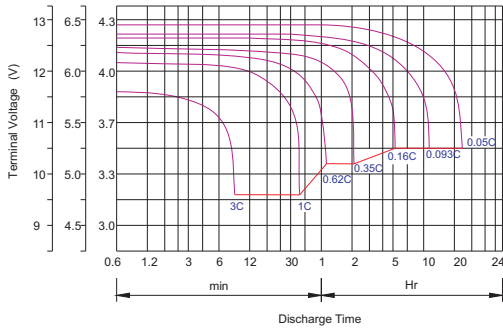
● Terminal Type (mm)



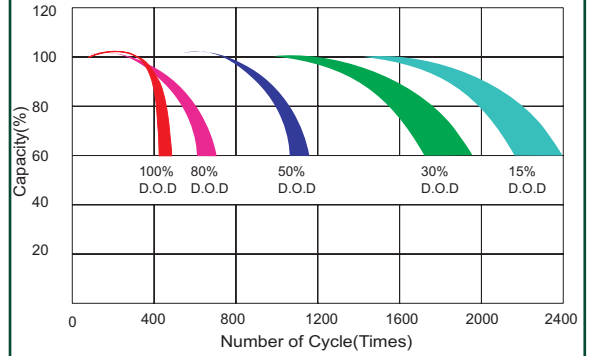
Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C													
Time		5min	10min	15min	30min	1hr	2hr	3hr	4hr	5hr	8hr	10hr	20hr
9.60V	A	295	194	156	105	55	32	24	18	15	11	10	5
	W	3041	2073	1678	1128	596	354	263	207	173	123	112	61
10.20V	A	285	175	147	100	52	31	23	18	15	11	10	5
	W	3048	1956	1649	1126	587	354	266	209	174	123	111	59
10.50V	A	276	157	129	94	50	30	22	18	15	10	9	5
	W	3015	1782	1471	1080	582	348	262	207	173	122	110	60
10.80V	A	266	148	120	86	49	29	22	17	14	10	9	5
	W	2985	1703	1380	1002	565	343	258	250	170	120	109	59
11.10V	A	257	138	111	77	47	29	21	17	14	10	9	5
	W	2916	1602	1287	904	552	337	251	202	167	118	106	57



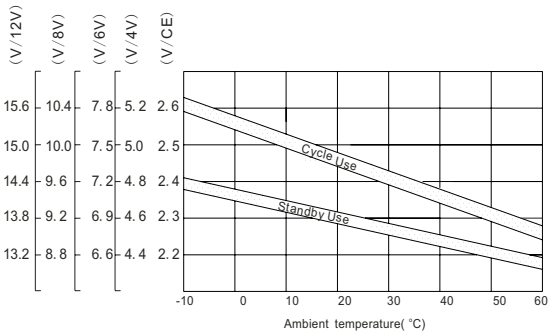
Discharge characteristic Curve



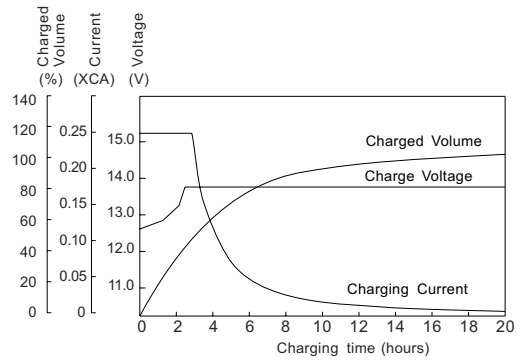
Cycle service life in relation to depth of discharge



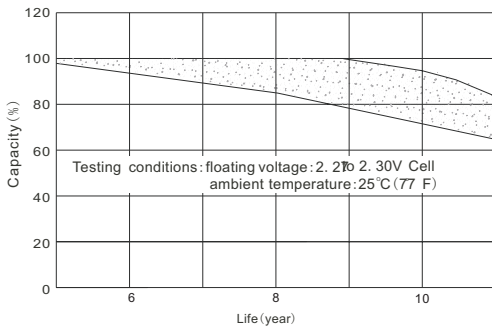
Relationship between charging voltage and temperature



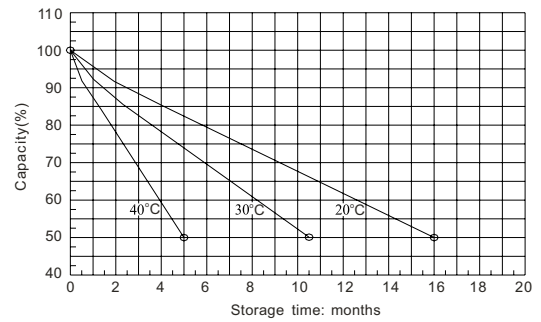
Constant voltage charging characteristic (0.25CA, at 25°C)



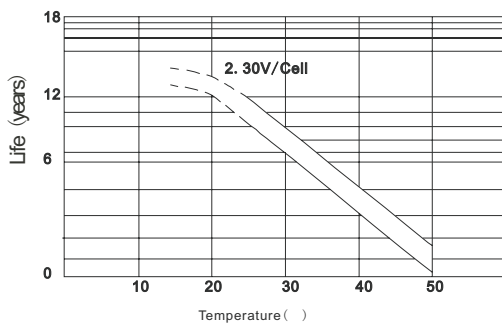
Life characteristics of standby use



Self-discharge characteristic



Temperature effects on float life



Charge characteristic Curve for standby use

