



● 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
- *Electric bicycle and wheelchairs, etc.
- *Power tools
- *Alarm system
- *Marine 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

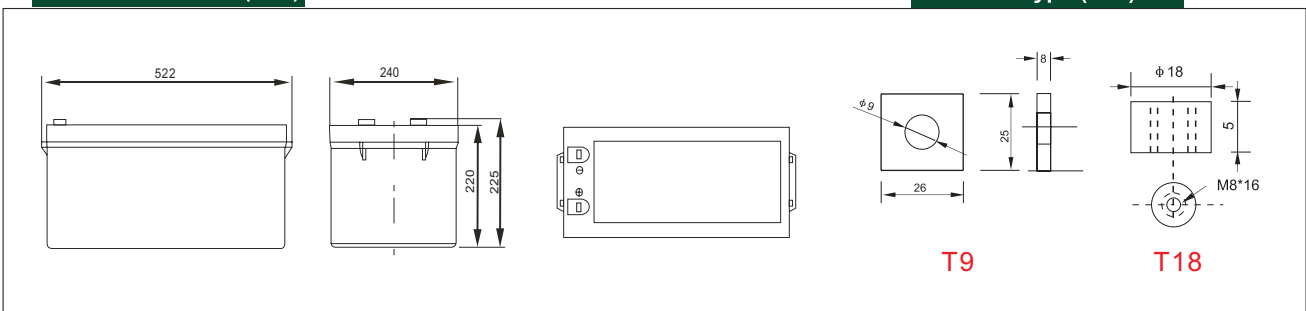
- *PositiveLead dioxide
- *ElectrolyteSulfuric acid thixotropic Gel
- *SeparatorMacromolecule polymer
- *ContainerABS(UL94-HB), Flammability Resistance of UL94-V2 can be available upon request
- *NegativeLead
- *Safety ValveEPDR
- *TerminalCopper

● Specification

Battery Model	Nominal Voltage		12V	
	Rated capacity (20 Hour rate)		200Ah	
Dimensions	Length	Width	Height	Total Height
	522mm (20.55 inches)	240mm(9.45inches)	220 mm(8.66 inches)	244mm(9.60 inches)
Approx Weight	63.0kg(138.89lbs)±3%			
Capacity 25°C (77°F)	20 Hour (10A,10.8V)	10 Hour (18.4A,10.5V)	5 Hour (34A,10.2V)	1 Hour (120A,9.6V)
	200Ah	184Ah	170Ah	120Ah
Max.discharge current	2000A(5 Sec.)			
Internal Resistance	Full charged at 25 °C: Approx 6.0 mΩ			
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 73A)		13.50-13.80V	

● Outer dimensions (mm)

● Terminal Type (mm)

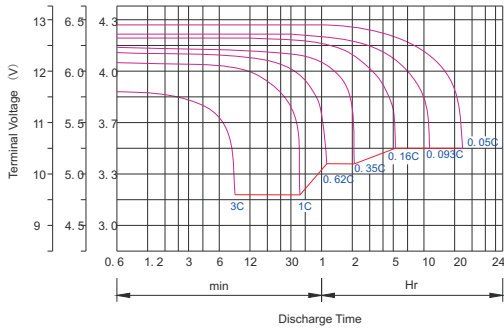


Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C (77°F)

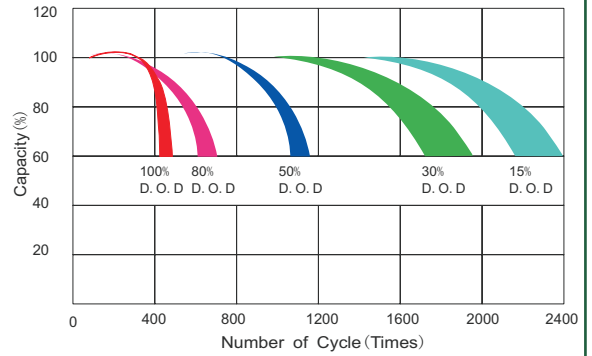
Time		5min	10min	15min	30min	1hr	2hr	3hr	4hr	5hr	8hr	10hr	20hr
9.60V	A	589.0	388.0	313.0	210.0	110.0	64.0	47.3	36.8	30.4	21.5	19.3	10.4
	W	6082.0	4146.0	3356.0	2255.0	1192.0	707.0	526.3	414.0	345.2	246.7	223.1	121.3
10.20V	A	571.0	350.0	295.0	201.0	104.0	61.0	46.0	35.9	29.8	21.0	19.0	10.1
	W	6096.0	3912.0	3298.0	2251.0	1174.0	708.0	532.7	417.2	347.5	245.4	222.6	118.7
10.50V	A	552.0	313.0	258.0	188.0	100.0	60.0	44.9	35.3	29.4	20.8	18.6	10.1
	W	6030.0	3565.0	2942.0	2160.0	1163.0	696.0	523.1	413.3	345.2	244.5	219.9	119.6
10.80V	A	532.0	295.0	240.0	173.0	97.0	59.0	43.8	34.8	28.7	20.2	18.4	9.9
	W	5970.0	3406.0	2760.0	2004.0	1131.0	685.0	516.3	410.6	339.3	239.8	218.7	118.3
11.10V	A	514.0	277.0	221.0	155.0	94.0	57.0	42.3	33.9	28.0	19.7	17.5	9.4
	W	5832.0	3205.0	2574.0	1808.0	1104.0	674.0	502.8	403.2	333.8	235.8	211.0	113.7



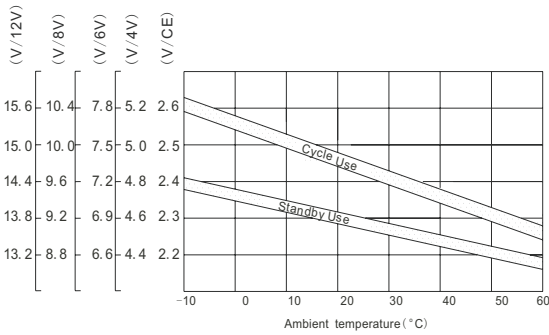
Discharge characteristic Curve



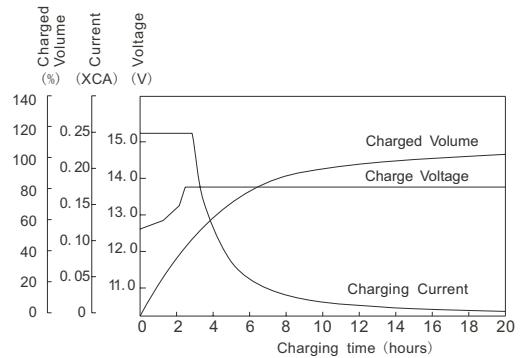
Cycle service life in relation to depth of discharge



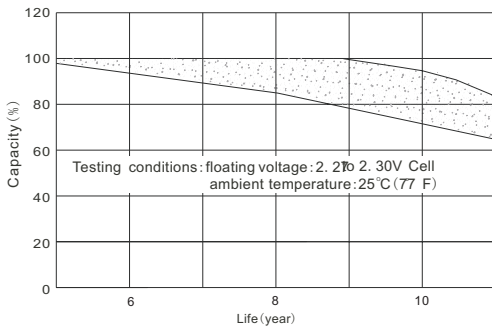
Relationship between charging voltage and temperature



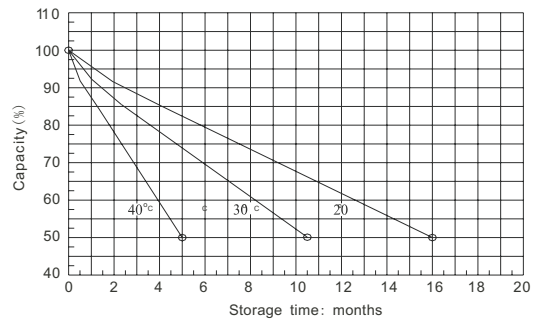
Constant voltage charging characteristic (0.25CA, at 25°C)



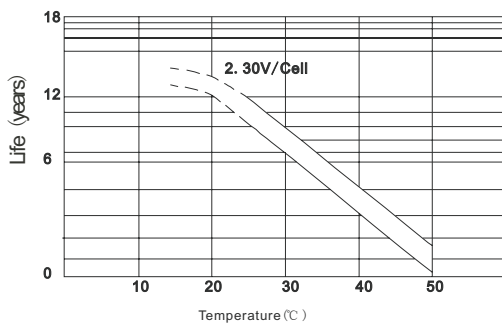
Life characteristics of standby use



Self-discharge characteristic



Temperature effects on float life



Charge characteristic Curve for standby use

