



● 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

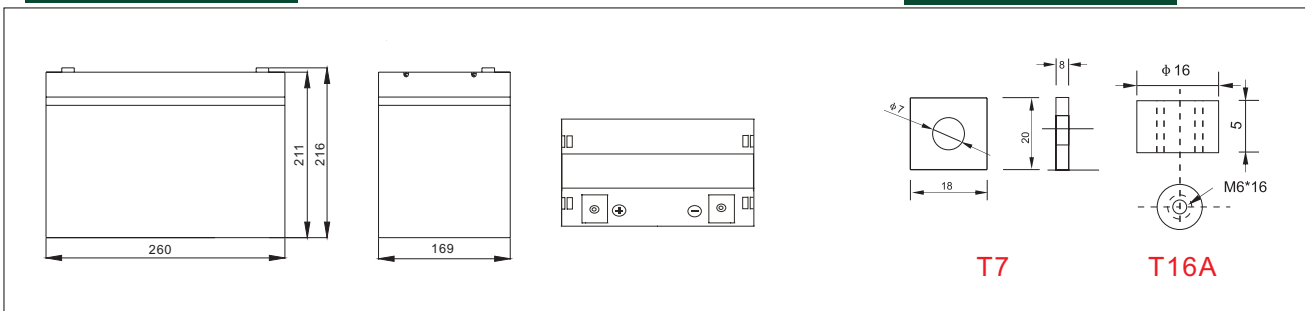
- *PositiveLead dioxide
- *ElectrolyteSulfuric acid thixotropic Gel
- *SeparatorMacromolecule polymer
- *ContainerABS(UL94-HB), Flammability Resistance of UL94-V2 can be available upon request
- *NegativeLead
- *Safety ValveEPDR
- *TerminalCopper

● Specification

Battery Model	Nominal Voltage		12V	
	Rated capacity(20 Hour rate)		80Ah	
Dimensions	Length	Width	Height	Total Height
	260mm (10.24 inches)	169mm(6.65inches)	211mm(8.31 inches)	216mm (8.50 inches)
Approx Weight	26 kg(57.33lbs) ±3%			
Capacity 25°C (77°F)	20 hour (4.0A,10.8V)	10 hour (7.36A,10.5V)	5 Hour (13.6A,10.2V)	1 Hour (48A,9.6V)
	80Ah	73.6 Ah	68Ah	48Ah
Max.discharge current	800A(5 Sec.)			
Internal Resistance	Full charged at 25 °C: Approx 10.0mΩ			
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 29.4A)		13.50-13.80V	

● Outer dimensions (mm)

● Terminal Type (mm)

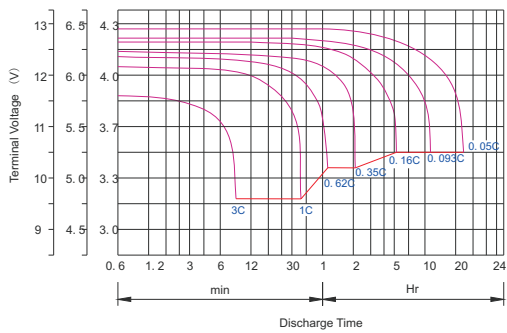


Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C (77°F)

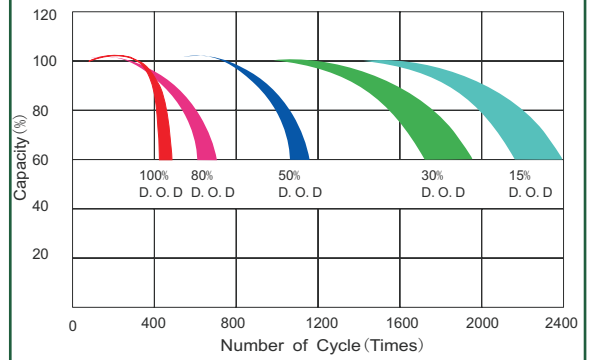
Time		5min	10min	15min	30min	1hr	2hr	3hr	4hr	5hr	8hr	10hr	20hr
9.60V	A	236.0	155.0	125.0	84.0	44.0	26.0	18.9	14.7	12.1	8.6	7.7	4.2
	W	2433.0	1659.0	1342.0	902.0	477.0	283.0	210.5	165.6	138.1	98.7	89.3	48.5
10.20V	A	228.0	140.0	118.0	80.0	42.0	25.0	18.4	14.4	11.9	8.4	7.6	4.0
	W	2438.0	1565.0	1319.0	901.0	469.0	283.0	213.1	166.9	139.0	98.2	89.1	47.5
10.50V	A	221.0	125.0	103.0	75.0	40.0	24.0	18.0	14.1	11.8	8.3	7.4	4.0
	W	2412.0	1426.0	1177.0	864.0	465.0	278.0	209.3	165.3	138.1	97.8	88.0	47.8
10.80V	A	213.0	118.0	96.0	69.0	39.0	23.0	17.5	13.9	11.5	8.1	7.4	4.0
	W	2388.0	1362.0	1104.0	802.0	452.0	274.0	206.5	164.3	135.7	95.9	87.5	47.3
11.10V	A	206.0	111.0	88.0	62.0	38.0	23.0	16.9	13.5	11.2	7.9	7.0	3.8
	W	2333.0	1282.0	1030.0	723.0	441.0	270.0	201.1	161.3	133.5	94.3	84.4	45.5



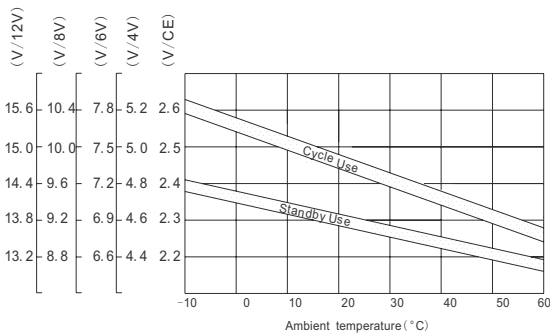
Discharge characteristic Curve



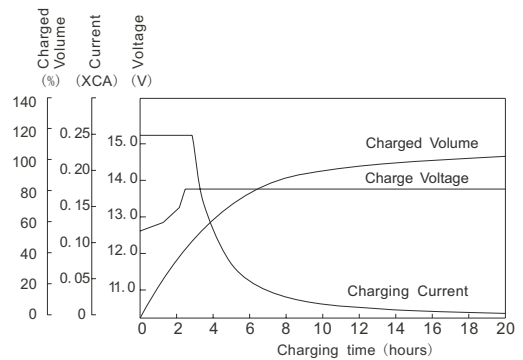
Cycle service life in relation to depth of discharge



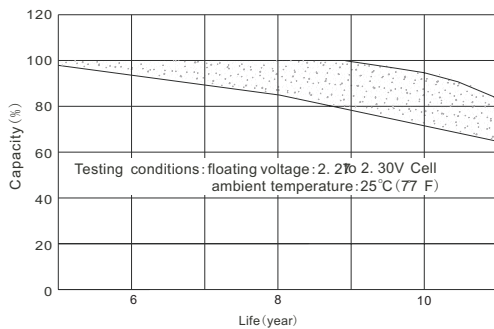
Relationship between charging voltage and temperature



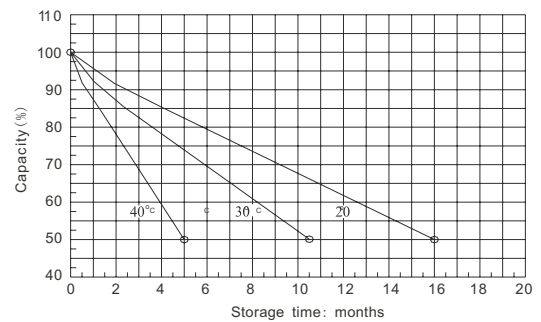
Constant voltage charging characteristic (0.25CA, at 25°C)



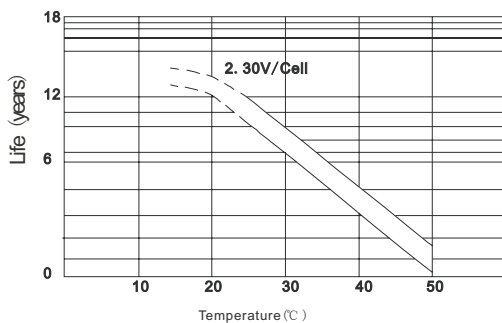
Life characteristics of standby use



Self-discharge characteristic



Temperature effects on float life



Charge characteristic Curve for standby use

