



● 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 18 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
- *Solar and Wind 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

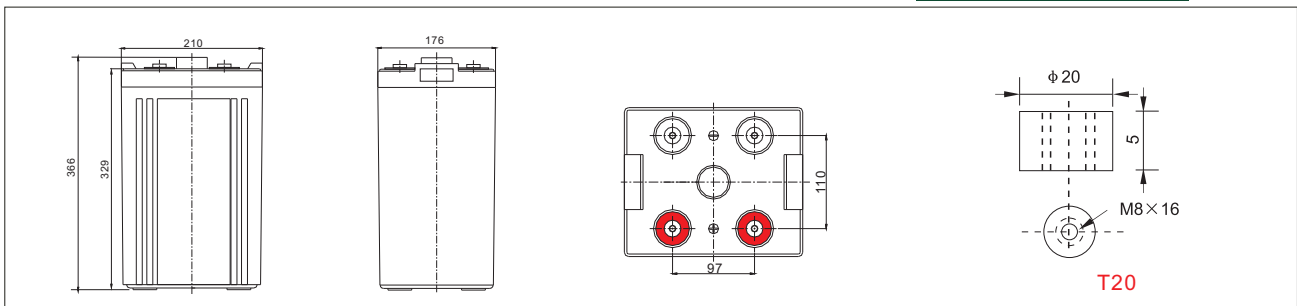


● Specification

Battery Model	Nominal Voltage		2V	
	Rated capacity (10 Hour rate)		400Ah	
Dimensions	Length	Width	Height	Total Height
	210mm (8.27 inches)	176mm(6.93 inches)	329mm(12.95 inches)	366mm (14.41 inches)
Approx Weight	27.5kg(60.63lbs)±3%			
Capacity 25 °C (77°F)	10 Hour rate(40A,1.80V)	5 Hour rate (68A,1.75V)	3Hour rate (100A,1.70V)	1 Hour rate (220A,1.60V)
	400Ah	340Ah	300Ah	220Ah
Max. discharge current	4000A(5 Sec.)			
Internal Resistance	Full charged at 25 °C (77°F): Approx 0.4mΩ			
Capacity affected by Temp. (10 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	
	2.35-2.40V (Initial charging current less than 160A)		2.25-2.30V	

● Outer dimensions (mm)

● Terminal Type (mm)

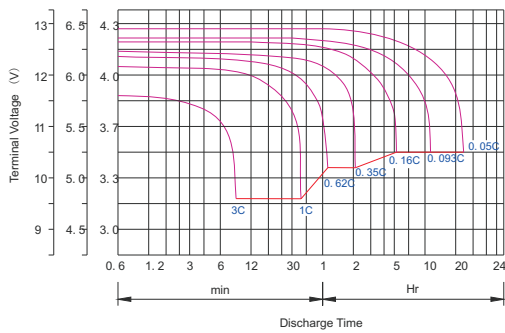


Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C (77°F)

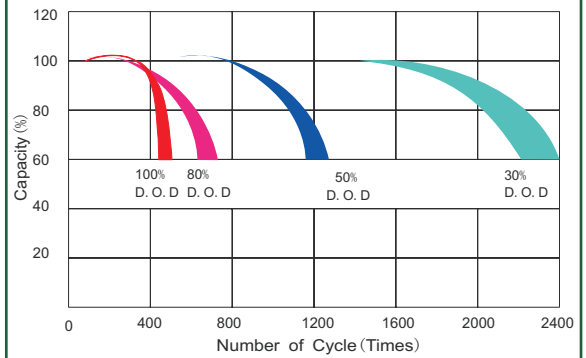
Time		5min	10min	15min	30min	1hr	2hr	3hr	4hr	5hr	8hr	10hr	20hr
1.60V	A	1281	844	680	456	240.0	140.0	102.8	80.0	66.0	46.8	42.0	22.7
	W	2204	1502	1216	817	432.0	256.2	190.7	150.0	125.1	89.4	80.9	44.0
1.70V	A	1241	762	641	436	225.6	133.6	100.0	78.0	64.8	45.6	41.2	22.0
	W	2209	1417	1195	816	425.3	256.6	193.0	151.2	125.9	88.9	80.7	43.0
1.75V	A	1200	681	560	408	218.4	130.4	97.6	76.8	64.0	45.2	40.4	22.0
	W	2185	1292	1066	783	421.5	252.1	189.5	149.8	125.1	88.6	79.7	43.3
1.80V	A	1157	642	521	376	211.2	127.2	95.2	75.6	62.4	44.0	40.0	21.6
	W	2163	1234	1000	726	409.7	248.3	187.1	148.8	122.9	86.9	79.2	42.9
1.85V	A	1118	602	481	336	204.0	124.0	92.0	73.6	60.8	42.8	38.0	20.4
	W	2113	1161	933	655	399.8	244.3	182.2	146.1	120.9	85.4	76.5	41.2



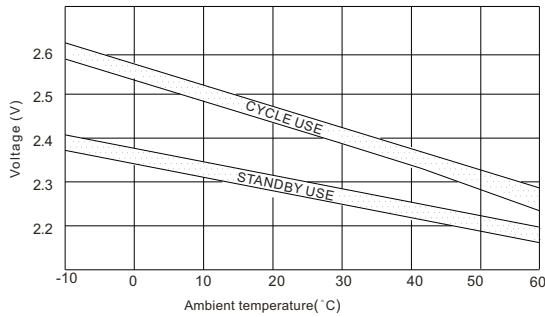
Discharge characteristic Curve



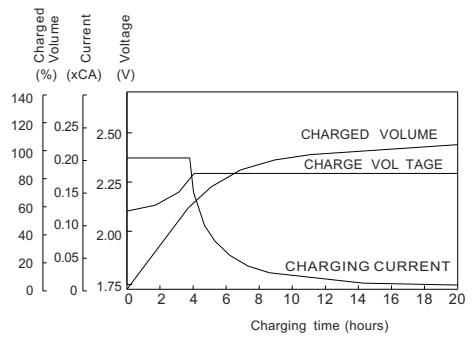
Cycle service life in relation to depth of discharge



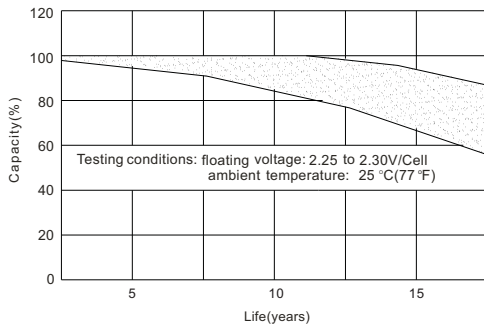
Relationship between charging voltage and temperature



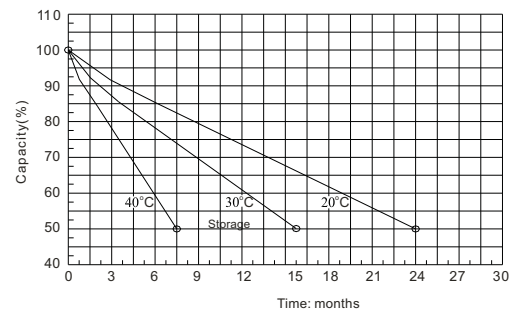
Constant voltage charging characteristic (0.25CA, at 25°C)



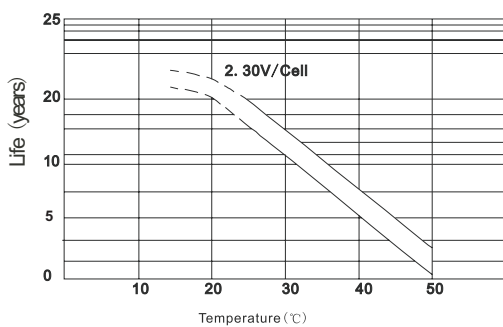
Life characteristics of standby use



Self-discharge characteristic



Temperature effects on float life



Charge characteristic Curve for standby use

