



**● 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**

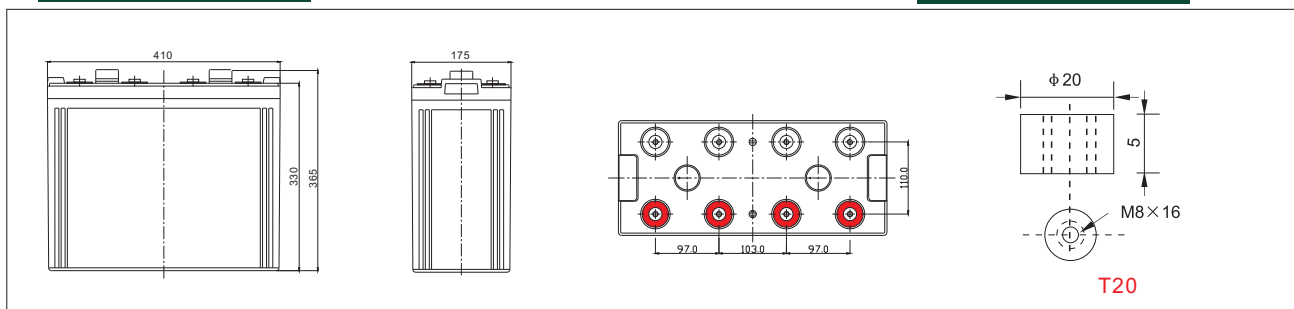
- \*Positive .....Lead dioxide
- \*Electrolyte .....Sulfuric acid thixotropic gel
- \*Separator .....Macromolecule polymer
- \*Container .....ABS(UL94-HB), Flammability Resistance of UL94-V2 can be available upon request
- \*Negative .....Lead
- \*Safety Valve .....EPDR
- \*Terminal .....Copper

**● Specification**

Battery Model	Nominal Voltage		2V	
	Rated capacity(10 Hour rate)		800Ah	
Dimensions	Length	Width	Height	Total Height
	410mm (16.14 inches)	175mm(6.89 inches)	330mm(12.99 inches)	365mm (14.37 inches)
Approx Weight	55.0kg(121.25lbs)±3%			
Capacity 25 °C (77°F)	10 Hour rate(80A,1.80V)	5 Hour rate (136A,1.75V)	3 Hour rate (200A,1.70V)	1 Hour rate (440A,1.60V)
	800Ah	680Ah	600Ah	440Ah
Max. discharge current	8000A(5 Sec.)			
Internal Resistance	Full charged at 25 °C (77°F): Approx 0.25mΩ			
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 320A)		2.25-2.30V	

**● Outer dimensions (mm)**

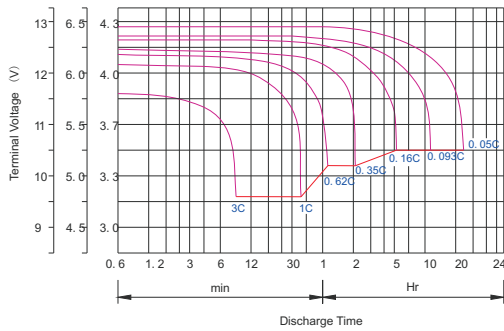
**● Terminal Type (mm)**



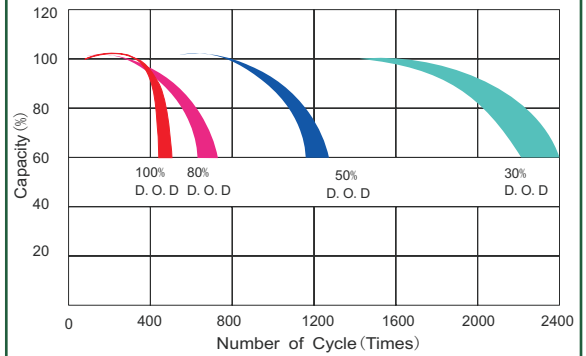
Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25 °C (77°F)													
Time		5min	10min	15min	30min	1hr	2hr	3hr	4hr	5hr	8hr	10hr	20hr
1.60V	A	2562	1688	1361	912	480.0	280.0	205.6	160.0	132.0	93.6	84.0	45.4
	W	4407	3005	2432	1634	864.0	512.4	381.4	300.0	250.1	178.8	161.7	87.9
1.70V	A	2482	1523	1282	872	451.2	267.2	200.0	156.0	129.6	91.2	82.4	44.0
	W	4417	2835	2390	1632	850.5	513.3	386.0	302.3	251.8	177.8	161.3	86.0
1.75V	A	2401	1362	1121	816	436.8	260.8	195.2	153.6	128.0	90.4	80.8	44.0
	W	4369	2583	2132	1565	843.0	504.1	379.1	299.5	250.1	177.2	159.3	86.7
1.80V	A	2314	1284	1042	752	422.4	254.4	190.4	151.2	124.8	88.0	80.0	43.2
	W	4326	2468	2000	1452	819.5	496.6	374.1	297.6	245.9	173.8	158.5	85.8
1.85V	A	2236	1203	962	672	408.0	248.0	184.0	147.2	121.6	85.6	76.0	40.8
	W	4226	2322	1866	1310	799.7	488.6	364.3	292.2	241.9	170.9	152.9	82.4



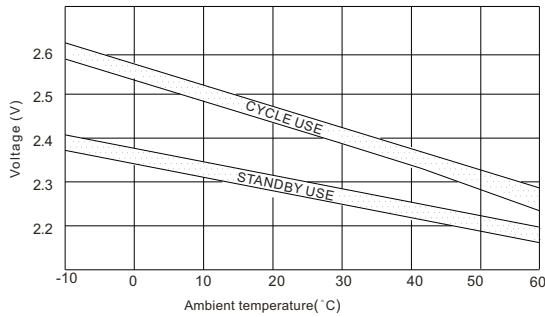
Discharge characteristic Curve



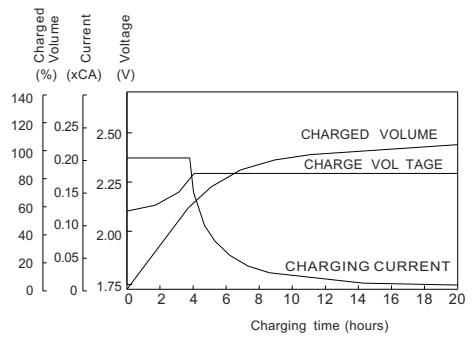
Cycle service life in relation to depth of discharge



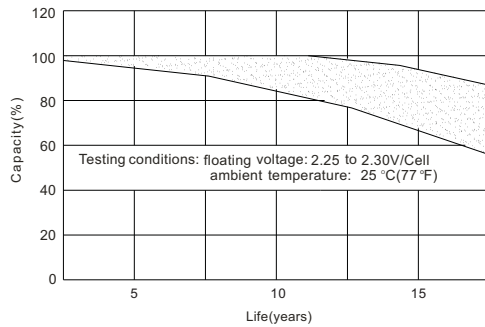
Relationship between charging voltage and temperature



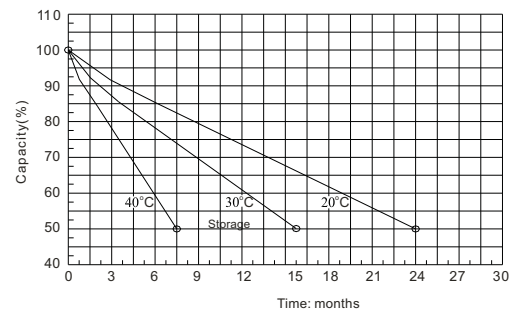
Constant voltage charging characteristic (0.25CA, at 25°C)



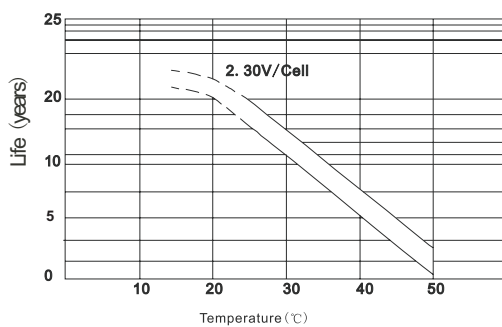
Life characteristics of standby use



Self-discharge characteristic



Temperature effects on float life



Charge characteristic Curve for standby use

