NAPEL POWER

NP25000G (2V500Ah)

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℃.
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

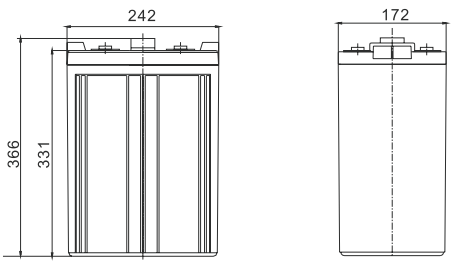
Construction

*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

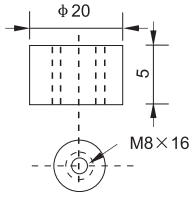
Specification

Battery Model	Nominal Voltage Rated capacity(10 Hour rate)	2V 500Ah		
Dimensions	Length 242mm (9.53 inches)	Width 172mm(6.77 inches)	Height 331mm(13.03 inches)	Total Height 366mm (14.41 inches)
Approx Weight	33.5kg(73.85lbs)±3%			
Capacity 25℃ (77℉)	10 Hour rate(50A,1.80V) 500Ah	5 Hour rate (85A,1.75V) 425Ah	3Hour rate (125A,1.70V) 375Ah	1 Hour rate (275A,1.60V) 275Ah
Max.discharge current	5000A(5 Sec.)			
Internal Resistance	Full charged at 25 ℃ (77℉): Approx 0.38mΩ			
Capacity affected by Temp. (10 HR)	40℃ (104 ℉) 102%	25℃ (77℉) 100%	0℃ (32℉) 85%	-15℃ (5℉) 65%
Self Discharge at 25℃ (77℉)	After 3 months storage 91%		After 6 months storage 82%	After 12 months storage 64%
Charge method 25℃ (77℉)	Cycle Use 2.35-2.40V (Initial charging current less than 200A)		Float Use 2.25-2.30V	

Outer dimensions (mm)



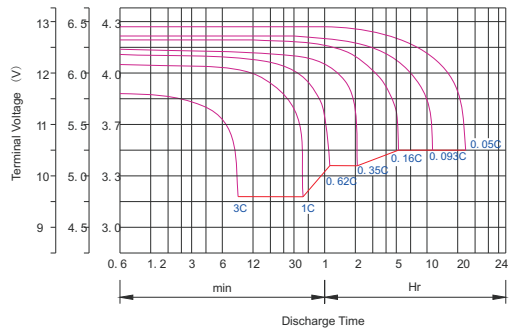
Terminal Type (mm)



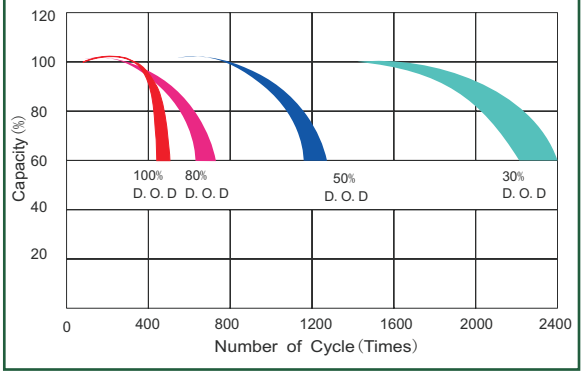
Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25℃(77℉)

Time		5min	10min	15min	30min	1hr	2hr	3hr	4hr	5hr	8hr	10hr	20hr
1.60V	A	1602	1055	851	570	300.0	175.0	128.5	100.0	82.5	58.5	52.5	28.4
	W	2755	1878	1520	1021	540.0	320.3	238.4	187.5	156.3	111.7	101.1	54.9
1.70V	A	1551	952	801	545	282.0	167.0	125.0	97.5	81.0	57.0	51.5	27.5
	W	2761	1772	1494	1020	531.6	320.8	241.3	189.0	157.4	111.2	100.8	53.8
1.75V	A	1501	852	701	510	273.0	163.0	122.0	96.0	80.0	56.5	50.5	27.5
	W	2731	1614	1332	978	526.9	315.1	236.9	187.2	156.3	110.7	99.6	54.2
1.80V	A	1446	803	651	470	264.0	159.0	119.0	94.5	78.0	55.0	50.0	27.0
	W	2704	1542	1250	908	512.2	310.4	233.8	186.0	153.7	108.6	99.1	53.6
1.85V	A	1398	752	601	420	255.0	155.0	115.0	92.0	76.0	53.5	47.5	25.5
	W	2641	1451	1166	819	499.8	305.4	227.7	182.6	151.2	106.8	95.6	51.5

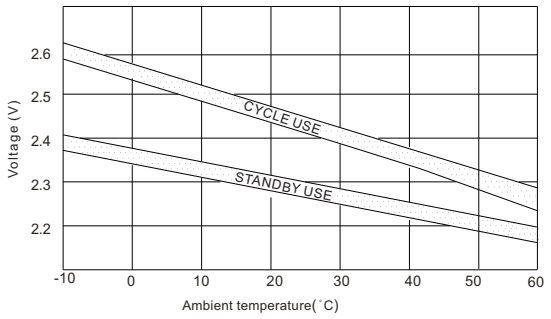
Discharge characteristic Curve



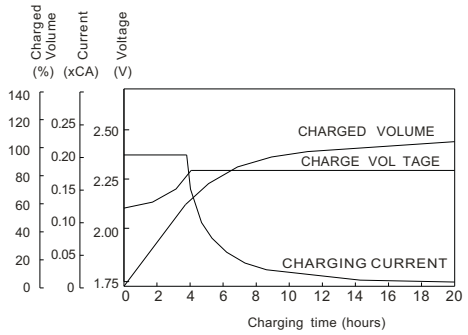
Cycle service life in relation to depth of discharge



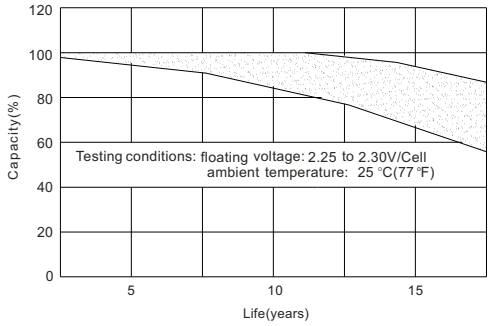
Relationship between charging voltage and temperature



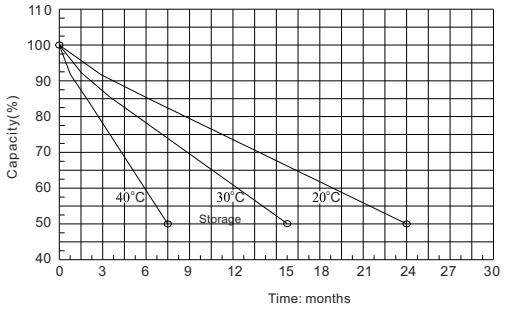
Constant voltage charging characteristic (0.25CA, at 25℃)



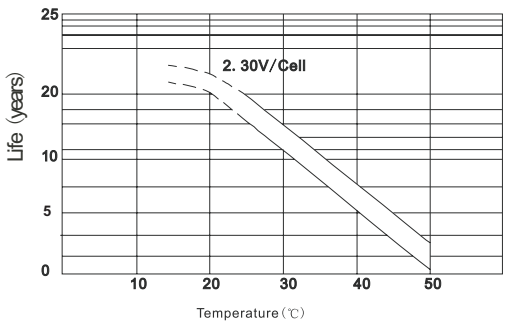
Life characteristics of standby use



Self-discharge characteristic



Temperature effects on float life



Charge characteristic Curve for standby use