



● 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

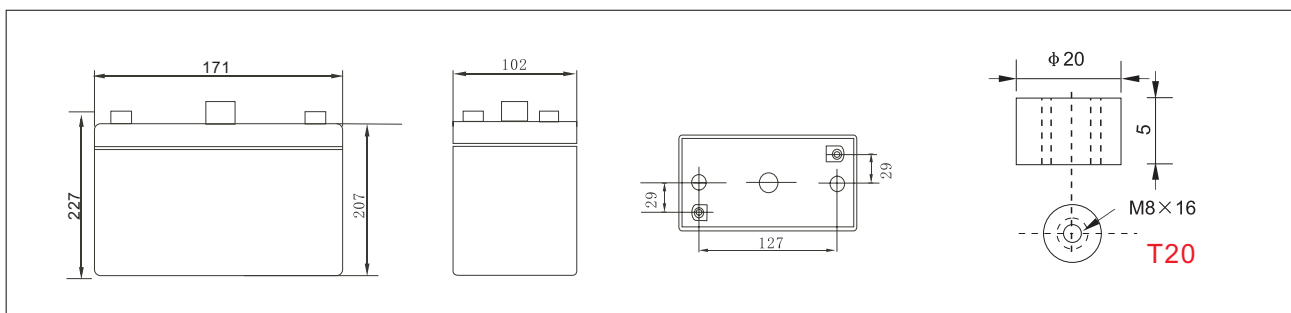
- *PositiveLead dioxide
- *ElectrolyteSulfuric acid thixotropic gel
- *SeparatorMacromolecule polymer
- *ContainerABS(UL94-HB), Flammability Resistance of UL94-V2 can be available upon request
- *NegativeLead
- *Safety ValveEPDR
- *TerminalCopper

● Specification

Battery Model	Nominal Voltage	2V		
	Rated capacity(10 Hour rate)	150Ah		
Dimensions	Length	Width	Height	Total Height
	172mm (6.77 inches)	102mm(4.02 inches)	207mm(8.15 inches)	227mm (8.94 inches)
Approx Weight	9.0kg(19.84lbs)±3%			
Capacity 25°C (77°F)	10 Hour rate(15.0A,1.80V)	5 Hour rate (25.5A,1.75V)	3 Hour rate (37.5A,1.70V)	1 Hour rate (82.5A,1.60V)
	150.0Ah	127.5Ah	112.5Ah	82.5Ah
Max. discharge current	1500A(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 60A)		2.25-2.30V	

● Outer dimensions (mm)

● Terminal Type (mm)

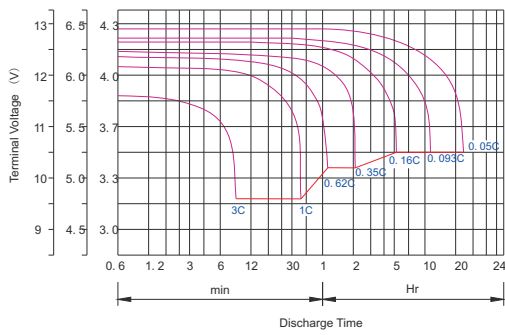


Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C (77°F)

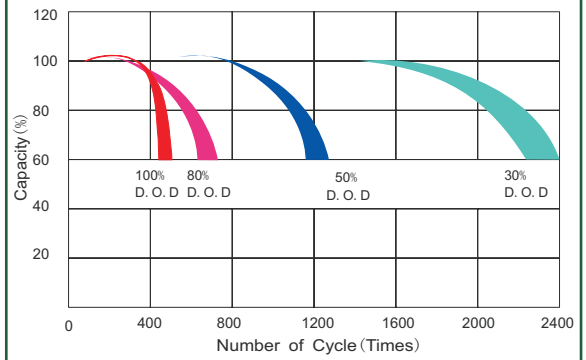
Time		5min	10min	15min	30min	1hr	2hr	3hr	4hr	5hr	8hr	10hr	20hr
1.60V	A	480	317	255	171	90.0	52.5	38.6	30.0	24.8	17.6	15.8	8.5
	W	826	563	456	306	162.0	96.1	71.5	56.3	46.9	33.5	30.3	16.5
1.70V	A	465	286	240	164	84.6	50.1	37.5	29.3	24.3	17.1	15.5	8.3
	W	828	532	448	306	159.5	96.2	72.4	56.7	47.2	33.3	30.3	16.1
1.75V	A	450	255	210	153	81.9	48.9	36.6	28.8	24.0	17.0	15.2	8.3
	W	819	484	400	293	158.1	94.5	71.1	56.2	46.9	33.2	29.9	16.3
1.80V	A	434	241	195	141	79.2	47.7	35.7	28.4	23.4	16.5	15.0	8.1
	W	811	463	375	272	153.6	93.1	70.2	55.8	46.1	32.6	29.7	16.1
1.85V	A	419	226	180	126	76.5	46.5	34.5	27.6	22.8	16.1	14.3	7.7
	W	792	435	350	246	149.9	91.6	68.3	54.8	45.3	32.0	28.7	15.5



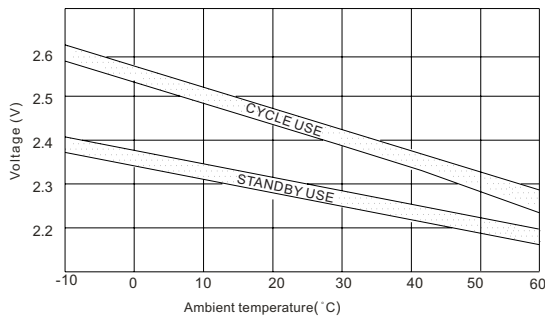
Discharge characteristic Curve



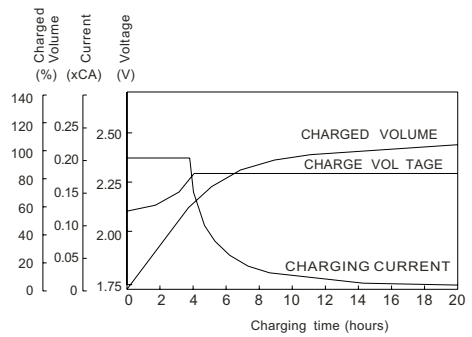
Cycle service life in relation to depth of discharge



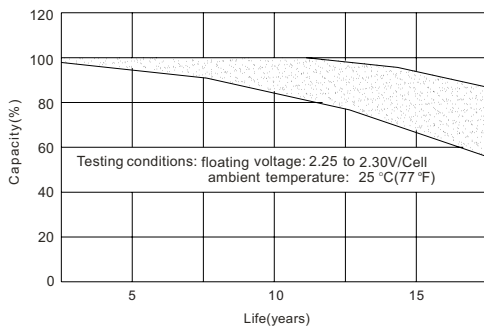
Relationship between charging voltage and temperature



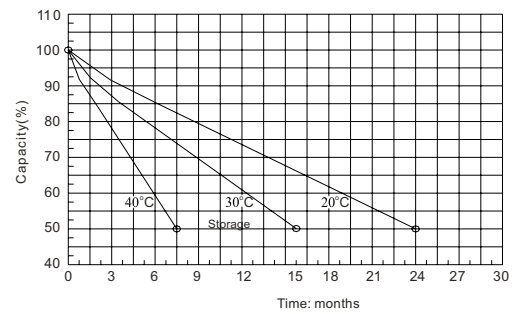
Constant voltage charging characteristic (0.25CA, at 25°C)



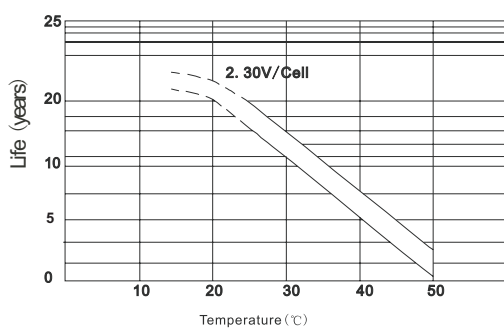
Life characteristics of standby use



Self-discharge characteristic



Temperature effects on float life



Charge characteristic Curve for standby use

