



● Deep Cycle Series Battery

NPD series VRLA batteries are superior deep cycle design with thick plates, high-density active materials And Slightly stronger electrolyte, Which can withstand repeated deep cyclic applications.
 Deep cycle series Batteries are the special design 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
- *Golf cars and buggies
- *Marine equipment
- *Solar and wind power system

● General Features

- *Safety Sealing
- *Non-spillable construction
- *High power density
- *Excellent recovery from Deep discharge
- *Thick plates and high active materials
- *Longer Life and low self-discharge design

● Construction

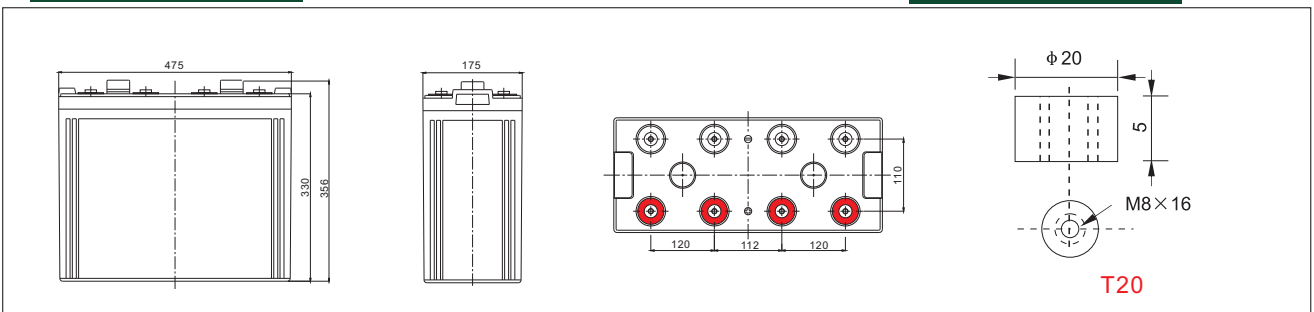
- *PositiveLead dioxide
- *ElectrolyteSulfuric acid
- *SeparatorFiber glass
- *ContainerABS(UL94-HB), Flammability Resistance of UL94-V2 can be available upon request
- *NegativeLead
- *Safety ValveEPDR
- *TerminalCopper

● Specification

Battery Model	Nominal Voltage	2V		
	Rated capacity(10 Hour rate)	1000Ah		
Dimensions	Length	Width	Height	Total Height
	475mm (18.70 inches)	175mm(6.89 inches)	330mm(12.99 inches)	356mm (14.02 inches)
Approx Weight	63.0kg(139lbs)+3%			
Capacity 25°C (77°F)	10 Hour rate (100A,1.80V)	5 Hour rate (170A,1.75V)	3 Hour rate (250A,1.70V)	1 Hour rate (550A,,1.60V)
	1000Ah	850Ah	750Ah	550Ah
Max.discharge current	10000A(5 Sec.)			
Internal Resistance	Full charged at 25 °C (77°F): Approx 0.2mΩ			
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 400A)		2.25-2.30V	

● Outer dimensions (mm)

● Terminal Type (mm)

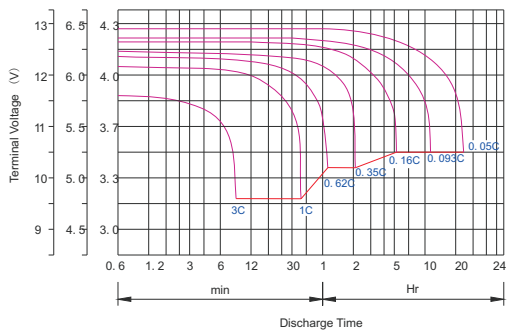


Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C (77°F)

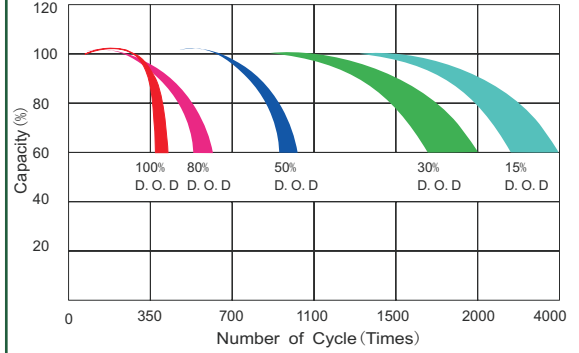
Time		5min	10min	15min	30min	1hr	2hr	3hr	4hr	5hr	8hr	10hr	20hr
1.60V	A	3203	2110	1701	1140	600.0	350.0	257.0	200.0	165.0	117.0	105.0	56.7
	W	5509	3756	3040	2043	1080.0	640.5	476.7	375.0	312.7	223.5	202.1	109.9
1.70V	A	3102	1904	1602	1090	564.0	334.0	250.0	195.0	162.0	114.0	103.0	55.0
	W	5522	3543	2988	2039	1063.1	641.6	482.5	377.9	314.8	222.3	201.7	107.5
1.75V	A	3001	1703	1401	1020	546.0	326.0	244.0	192.0	160.0	113.0	101.0	55.0
	W	5462	3229	2665	1956	1053.8	630.2	473.8	374.4	312.6	221.5	199.2	108.4
1.80V	A	2892	1605	1302	940	528.0	318.0	238.0	189.0	156.0	110.0	100.0	54.0
	W	5408	3085	2500	1815	1024.3	620.7	467.7	372.0	307.3	217.3	198.1	107.2
1.85V	A	2795	1504	1202	840	510.0	310.0	230.0	184.0	152.0	107.0	95.0	51.0
	W	5283	2903	2332	1638	999.6	610.7	455.4	365.2	302.3	213.6	191.1	103.0



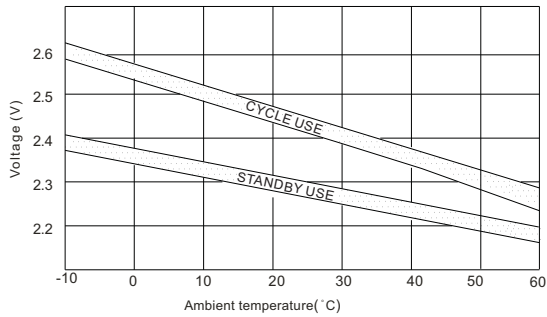
Discharge characteristic Curve



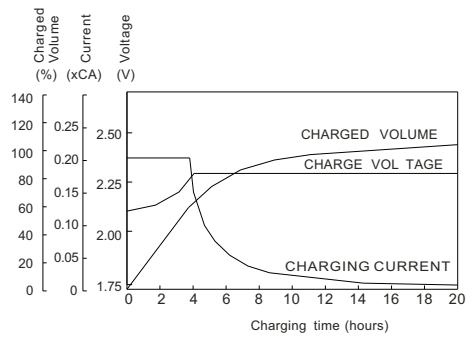
Cycle service life in relation to depth of discharge



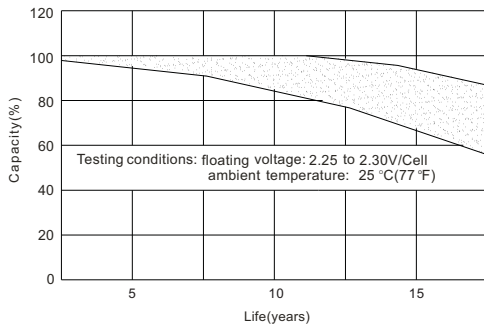
Relationship between charging voltage and temperature



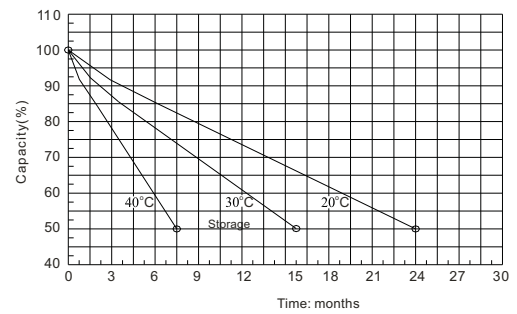
Constant voltage charging characteristic (0.25CA, at 25°C)



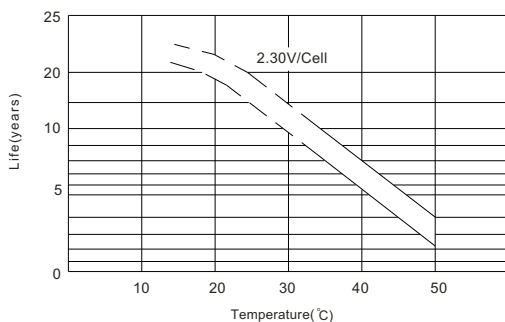
Life characteristics of standby use



Self-discharge characteristic



Temperature effects on float life



Charge characteristic Curve for standby use

