



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

Specification

Construction

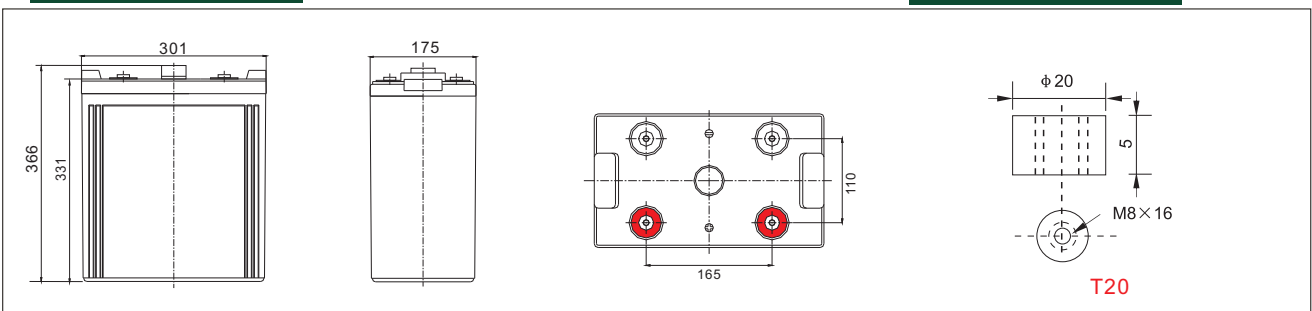
- *PositiveLead dioxide
- *ElectrolyteSulfuric acid
- *SeparatorFiber glass
- *ContainerABS(UL94-HB), Flammability Resistance of UL94-V2 can be available upon request
- *NegativeLead
- *Safety ValveEPDR
- *TerminalCopper



Battery Model	Nominal Voltage 2V			
	Rated capacity(10 Hour rate) 600Ah			
Dimensions	Length	Width	Height	Total Height
	301mm (11.85 inches)	175mm(6.89 inches)	331mm(13.03 inches)	366mm (14.41 inches)
Approx Weight	38.0kg(83.77lbs)±3%			
Capacity 25°C (77°F)	10 Hour rate (60A,1.80V) 600Ah	5 Hour rate (102A,1.75V) 510Ah	3 Hour rate (150A,1.70V) 450Ah	1 Hour rate (330A,1.60V) 330Ah
	Max. discharge current 6000A(5 Sec.)			
Internal Resistance	Full charged at 25 °C (77°F): Approx 0.35mΩ			
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 91%		After 6 months storage 82%	After 12 months storage 64%
	Cycle Use 2.35-2.40V (Initial charging current less than 240A)		Float Use 2.25-2.30V	
Charge method 25°C (77°F)				

Outer dimensions (mm)

Terminal Type (mm)

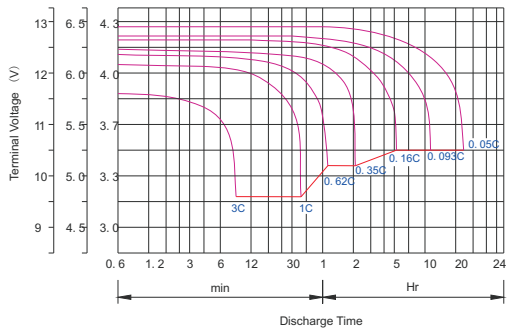


Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C (77°F)

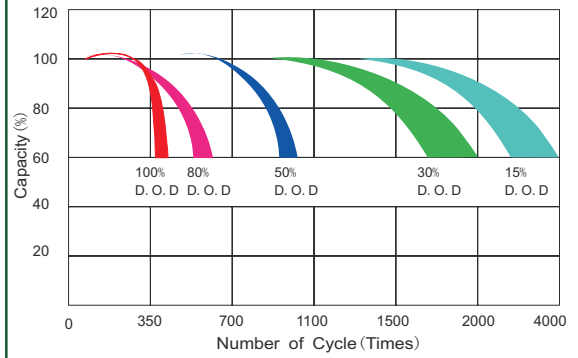
Time		5min	10min	15min	30min	1hr	2hr	3hr	4hr	5hr	8hr	10hr	20hr
1.60V	A	1922	1266	1021	684	360.0	210.0	154.2	120.0	99.0	70.2	63.0	34.0
	W	3305	2253	1824	1226	648.0	384.3	286.0	225.0	187.6	134.1	121.3	65.9
1.70V	A	1861	1142	961	654	338.4	200.4	150.0	117.0	97.2	68.4	61.8	33.0
	W	3313	2126	1793	1224	637.9	385.0	289.5	226.7	188.9	133.4	121.0	64.5
1.75V	A	1801	1022	841	612	327.6	195.6	146.4	115.2	96.0	67.8	60.6	33.0
	W	3277	1937	1599	1174	632.3	378.1	284.3	224.6	187.6	132.9	119.5	65.0
1.80V	A	1735	963	781	564	316.8	190.8	142.8	113.4	93.6	66.0	60.0	32.4
	W	3245	1851	1500	1089	614.6	372.4	280.6	223.2	184.4	130.4	118.9	64.3
1.85V	A	1677	902	721	504	306.0	186.0	138.0	110.4	91.2	64.2	57.0	30.6
	W	3170	1742	1399	983	599.8	366.4	273.2	219.1	181.4	128.1	114.7	61.8



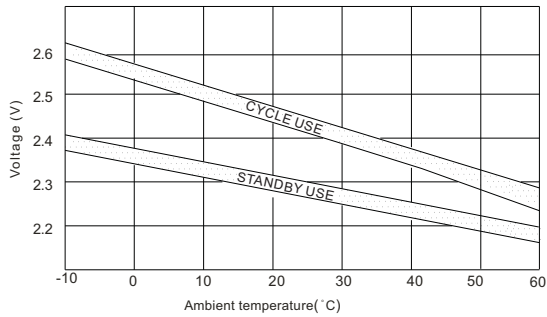
Discharge characteristic Curve



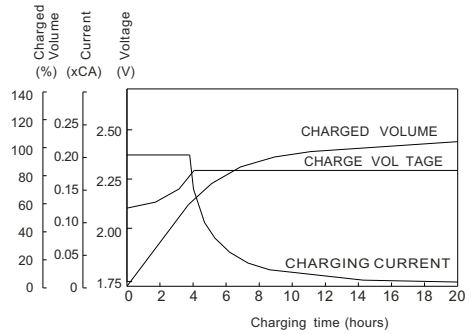
Cycle service life in relation to depth of discharge



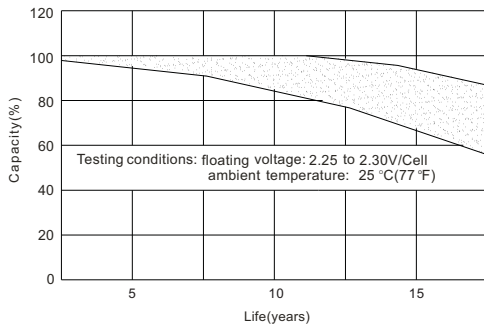
Relationship between charging voltage and temperature



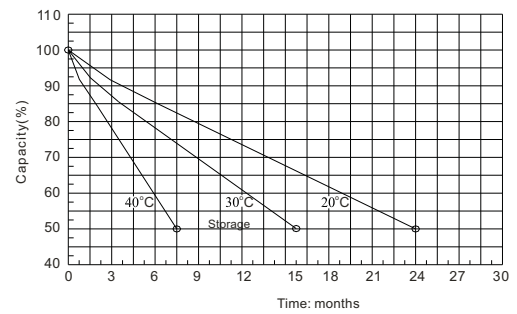
Constant voltage charging characteristic (0.25CA, at 25°C)



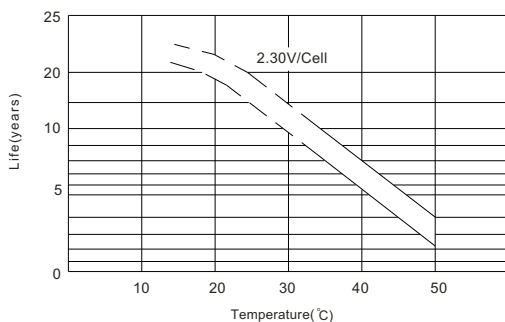
Life characteristics of standby use



Self-discharge characteristic



Temperature effects on float life



Charge characteristic Curve for standby use

