



● NPL General Series Battery

NPL General Series VRLA batteries are designed with AGM (Absorbent Glass Mat) technology, High performance plates and electrolyte to give extra power output for common power backup system. NPL series Batteries are the general purpose 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
- *Solar power and wind power systems, etc.
- *Power tools
- *Power station
- *Marine equipment
- *Fire and Security 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

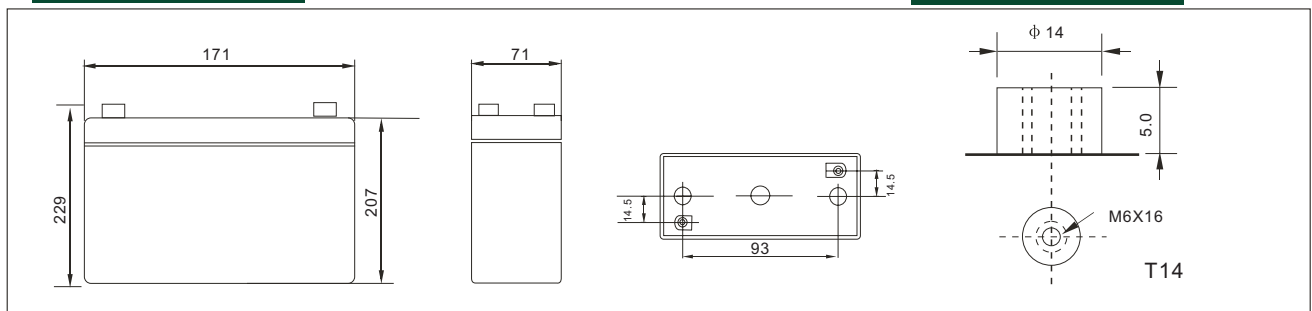
- *PositiveLead dioxide
- *ElectrolyteSulfuric acid
- *SeparatorFiber glass
- *ContainerABS(UL94-HB), Flammability Resistance of UL94-V2 can be available upon request
- *NegativeLead
- *Safety ValveEPDR
- *TerminalCopper

● Specification

Battery Model	Nominal Voltage	2V			
	Rated capacity(10 Hour rate)	100Ah			
Dimensions	Length	Width	Height	Total Height	
	171mm (6.73 inches)	71mm(2.80 inches)	207mm(8.15 inches)	229mm (9.02 inches)	
Approx Weight	5.60kg(12.35lbs)±3%				
Capacity 25°C (77°F)	10 Hour rate (10A, 1.8V)	5 Hour rate (16A, 1.75V)	3 Hour rate (25A, 1.7V)	1 Hour rate (60A, 1.6V)	
	100Ah	80Ah	75Ah	60Ah	
Max. discharge current	500A(5Sec.)				
Internal Resistance	Full charged at 25 °C (77°F): Approx 1.0mΩ				
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 30A)			2.25-2.30V	

● Outer dimensions (mm)

● Terminal Type (mm)

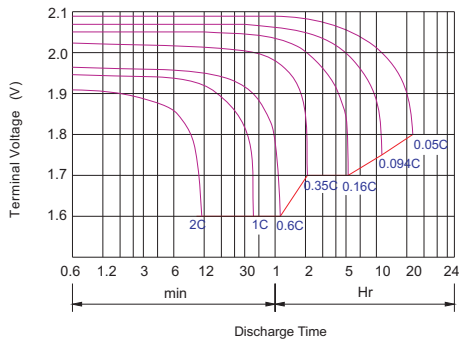


Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C(77°F)

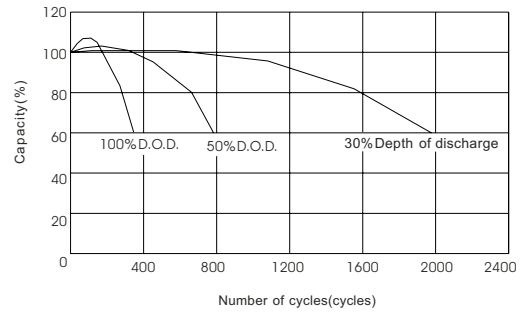
Time		5min	10min	15min	30min	1hr	2hr	3hr	4hr	5hr	8hr	10hr	20hr
1.60V	A	320	211	170	114	60.0	35.0	25.7	20.0	16.5	11.7	10.5	5.7
	W	551	376	304	204	108.0	64.1	47.7	37.5	31.3	22.3	20.2	11.0
1.70V	A	310	190	160	109	56.4	33.4	25.0	19.5	16.2	11.4	10.3	5.5
	W	552	354	299	204	106.3	64.2	48.3	37.8	31.5	22.2	20.2	10.8
1.75V	A	300	170	140	102	54.6	32.6	24.4	19.2	16.0	11.3	10.1	5.5
	W	546	323	266	196	105.4	63.0	47.4	37.4	31.3	22.1	19.9	10.8
1.80V	A	289	161	130	94	52.8	31.8	23.8	18.9	15.6	11.0	10.0	5.4
	W	541	308	250	182	102.4	62.1	46.8	37.2	30.7	21.7	19.8	10.7
1.85V	A	280	150	120	84	51.0	31.0	23.0	18.4	15.2	10.7	9.5	5.1
	W	528	290	233	164	100.0	61.1	45.5	36.5	30.2	21.4	19.1	10.3



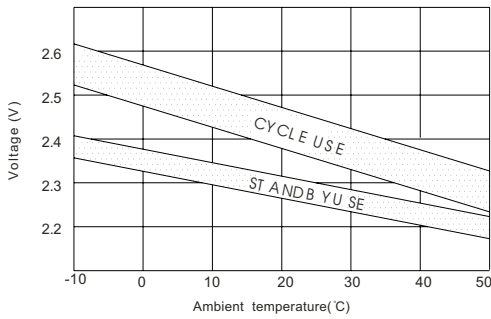
Discharge characteristic Curve



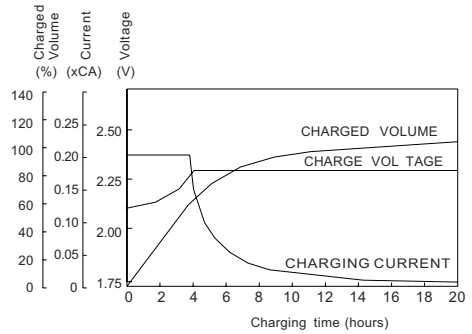
Cycle service life in relation to depth of discharge



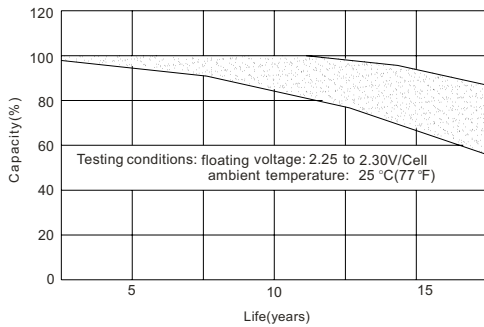
Relationship between charging voltage and temperature



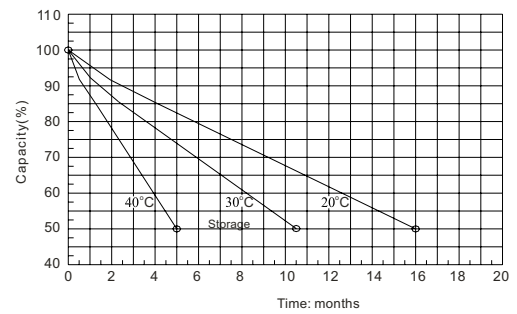
Constant voltage charging characteristic (0.25CA, at 25°C)



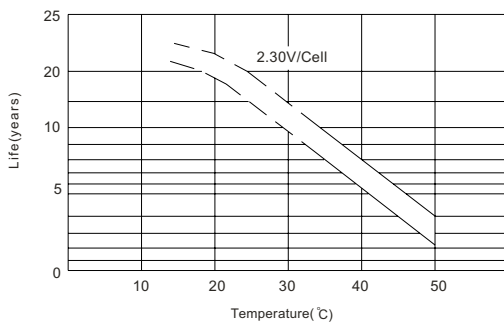
Life characteristics of standby use



Self-discharge characteristic



Temperature effects on float life



Charge characteristic Curve for standby use

