NAPEL POWER NPL24500 (2V450Ah)

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℃.
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

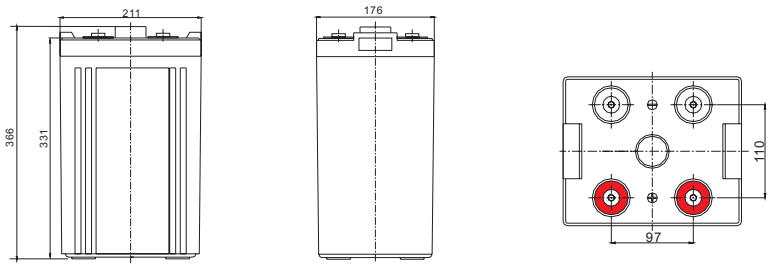
Construction

*Positive .....Lead dioxide
*Electrolyte .....Sulfuric acid
*Separator .....Fiber glass
*Container .....ABS(UL94-HB), Flammability Resistance of UL94-V2 can be available upon request
*Negative .....Lead
*Safety Valve .....EPDR
*Terminal .....Copper

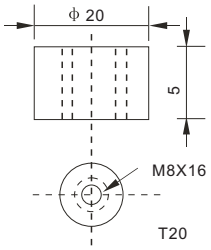
Specification

Battery Model	Nominal Voltage	2V		
	Rated capacity(10 Hour rate)	450Ah		
Dimensions	Length	Width	Height	Total Height
	211mm (8.31 inches)	176mm(6.93 inches)	331mm(13.03 inches)	366mm (14.41 inches)
Approx Weight	27.50kg(60.64lbs)±3%			
Capacity 25℃ (77℉)	10 Hour rate (45A,1.8V)	5 Hour rate (72A,1.75V)	3 Hour rate (112.5A,1.7V)	1 Hour rate (270A,1.6V)
	450Ah	360Ah	337.5Ah	270Ah
Max. discharge current	2250A(5Sec.)			
Internal Resistance	Full charged at 25 ℃ (77℉): Approx 0.39mΩ			
Capacity affected by Temp. (10 HR)	40℃ (104 ℉)	25℃ (77℉)	0℃ (32℉)	-15℃ (5℉)
	102%	100%	85%	65%
Self Discharge at 25℃ (77℉)	After 3 months storage		After 6 months storage	After 12 months storage
	91%		82%	64%
Charge method 25℃ (77℉)	Cycle Use		Float Use	
	2.35-2.40V (Initial charging current less than 180A)		2.25-2.30V	

Outer dimensions (mm)



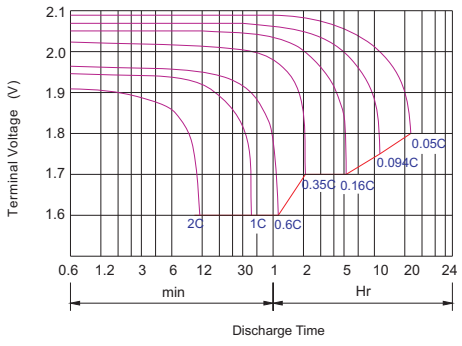
Terminal Type (mm)



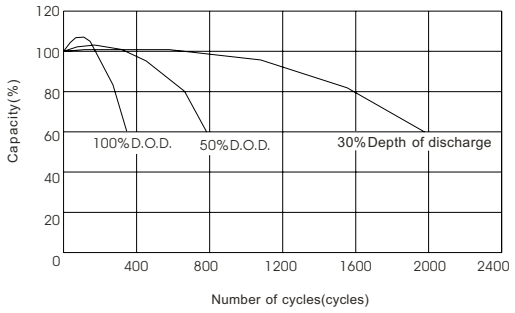
Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25℃(77℉)

Time		5min	10min	15min	30min	1hr	2hr	3hr	4hr	5hr	8hr	10hr	20hr
1.60V	A	1441	950	765	513	270.0	157.5	115.7	90.0	74.3	52.7	47.3	25.5
	W	2479	1690	1368	919	486.0	288.2	214.5	168.8	140.7	100.6	91.0	49.4
1.70V	A	1396	857	721	491	253.8	150.3	112.5	87.8	72.9	51.3	46.4	24.8
	W	2485	1595	1344	918	478.4	288.7	217.1	170.1	141.6	100.0	90.8	48.4
1.75V	A	1350	766	630	459	245.7	146.7	109.8	86.4	72.0	50.9	45.5	24.8
	W	2458	1453	1199	880	474.2	283.6	213.2	168.5	140.7	99.7	89.6	48.8
1.80V	A	1301	722	586	423	237.6	143.1	107.1	85.1	70.2	49.5	45.0	24.3
	W	2434	1388	1125	817	460.9	279.3	210.5	167.4	138.3	97.8	89.1	48.2
1.85V	A	1258	677	541	378	229.5	139.5	103.5	82.8	68.4	48.2	42.8	23.0
	W	2377	1306	1049	737	449.8	274.8	204.9	164.4	136.0	96.1	86.0	46.4

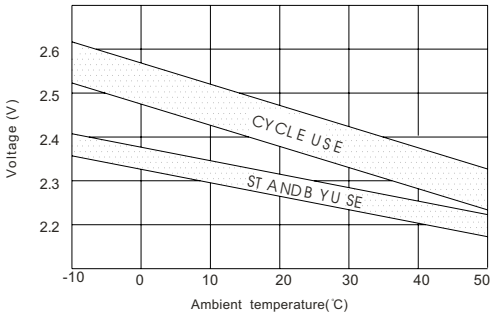
Discharge characteristic Curve



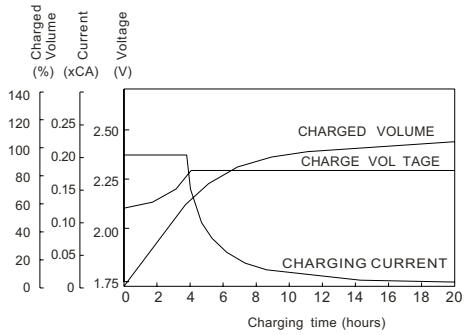
Cycle service life in relation to depth of discharge



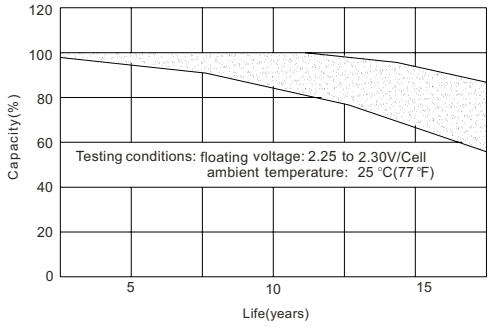
Relationship between charging voltage and temperature



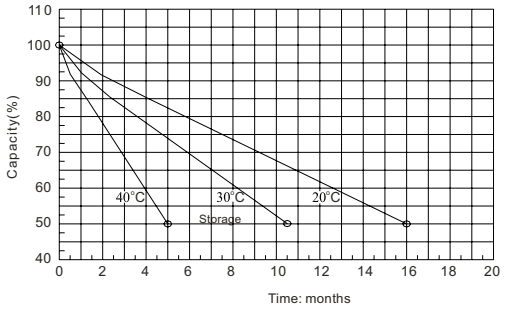
Constant voltage charging characteristic (0.25CA, at 25 C) °



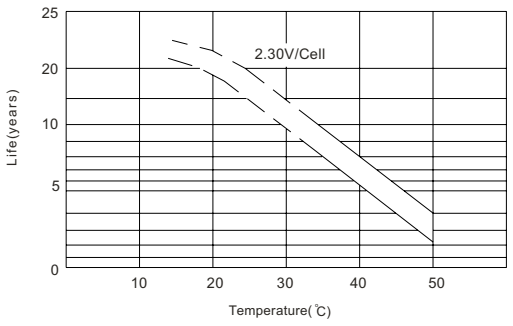
Life characteristics of standby use



Self-discharge characteristic



Temperature effects on float life



Charge characteristic Curve for standby use