NAPEL POWER NPL2500 (2V50Ah)

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

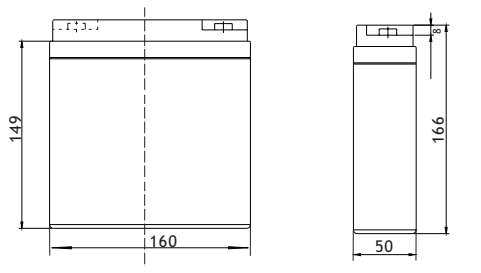
Construction

*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

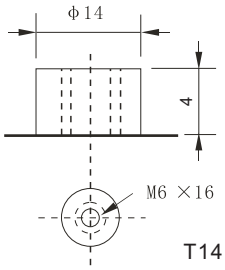
Specification

Battery Model	Nominal Voltage	2V		
	Rated capacity(10 Hour rate)	50Ah		
Dimensions	Length	Width	Height	Total Height
	160mm (6.30 inches)	50mm(1.97 inches)	166mm(6.54 inches)	166mm (6.54inches)
Approx Weight	2.90kg(6.39lbs)±3%			
Capacity 25℃ (77℉)	10 Hour rate (5A,1.8V)	5 Hour rate (8A,1.75V)	3 Hour rate (12.5A,1.7V)	1 Hour rate (30A,1.6V)
	50Ah	40Ah	37.5Ah	30Ah
Max.discharge current	250A(5Sec.)			
Internal Resistance	Full charged at 25 ℃ (77℉): Approx 1.5mΩ			
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 15A)		2.25-2.30V	

Outer dimensions (mm)



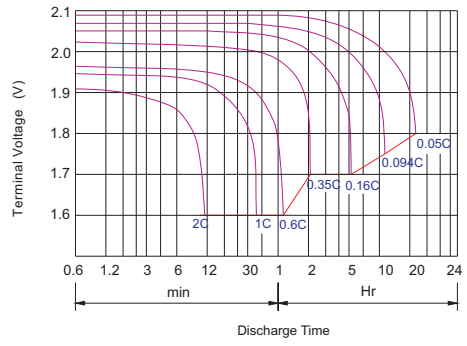
Terminal Type (mm)



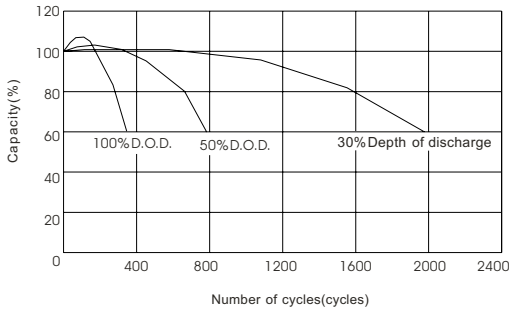
Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25℃(77℉)

Time		5min	10min	15min	30min	1hr	2hr	3hr	4hr	5hr	8hr	10hr	20hr
1.60V	A	160	106	85	57	30.0	17.5	12.9	10.0	8.3	5.9	5.3	2.8
	W	275	188	152	102	54.0	32.0	23.8	18.8	15.6	11.2	10.1	5.5
1.70V	A	155	95	80	55	28.2	16.7	12.5	9.8	8.1	5.7	5.2	2.8
	W	276	177	149	102	53.2	32.1	24.1	18.9	15.7	11.1	10.1	5.4
1.75V	A	150	85	70	51	27.3	16.3	12.2	9.6	8.0	5.7	5.1	2.8
	W	273	161	133	98	52.7	31.5	23.7	18.7	15.6	11.1	10.0	5.4
1.80V	A	145	80	65	47	26.4	15.9	11.9	9.5	7.8	5.5	5.0	2.7
	W	270	154	125	91	51.2	31.0	23.4	18.6	15.4	10.9	9.9	5.4
1.85V	A	140	75	60	42	25.5	15.5	11.5	9.2	7.6	5.4	4.8	2.6
	W	264	145	117	82	50.0	30.5	22.8	18.3	15.1	10.7	9.6	5.2

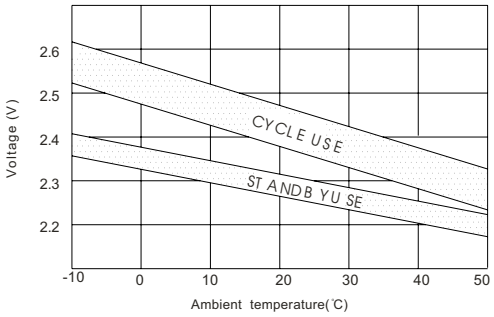
Discharge characteristic Curve



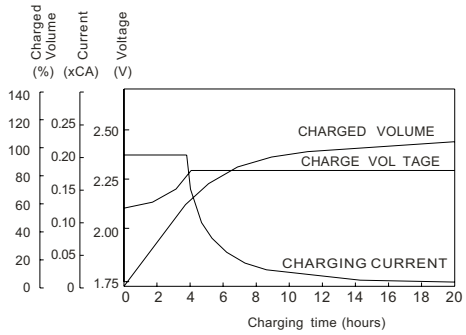
Cycle service life in relation to depth of discharge



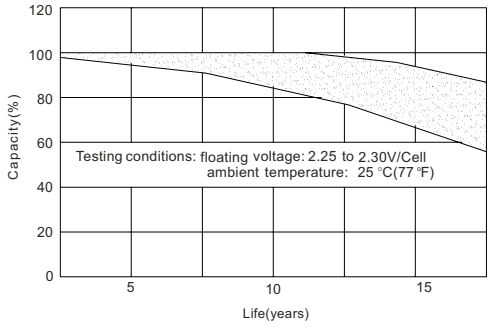
Relationship between charging voltage and temperature



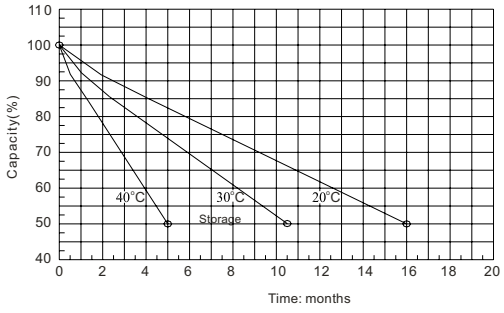
Constant voltage charging characteristic (0.25CA, at 25℃)



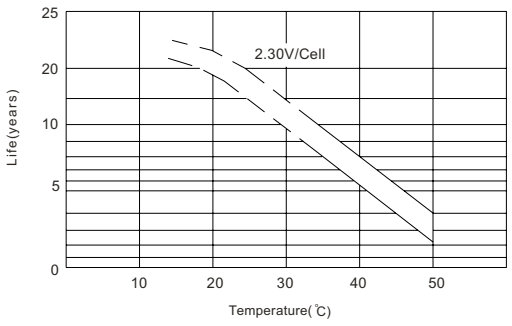
Life characteristics of standby use



Self-discharge characteristic



Temperature effects on float life



Charge characteristic Curve for standby use