NAPEL POWER

NP121500G(12V150Ah)

NPG GEL Series Battery

NPG Series batteries are designed with special separator and GEL deep cycle technology to give Extra-durable cyclic performance at extreme temperature.
NPG series Batteries are the DEEP CYCLE batteries with 12 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
*Electric bicycle and wheelchairs, etc.
*Power tools
*Alarm system
*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

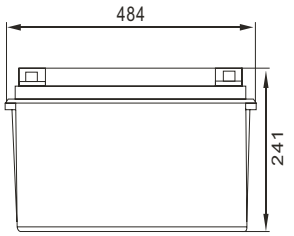
Construction

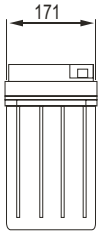
*Positive .....Lead dioxide
*Electrolyte .....Sulfuric acid thixotropic Gel
*Separator .....Macromolecule polymer
*Container .....ABS(UL94-HB), Flammability Resistance of UL94-V2 can be available upon request
*Negative .....Lead
*Safety Valve .....EPDR
*Terminal .....Copper

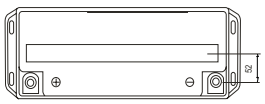
Specification

Battery Model	Nominal Voltage	12V		
	Rated capacity(20 Hour rate)	150Ah		
Dimensions	Length	Width	Height	Total Height
	484mm (19.06 inches)	171mm(6.73inches)	241mm(9.49 inches)	241mm(9.49 inches)
Approx Weight	49.0 kg(108.05 lbs) ±3%			
Capacity 25℃ (77℉)	20 hour (7.5A,10.8V)	10 hour (13.8A,10.5V)	5 Hour (25.5A,10.2V)	1 Hour (90.0A,9.6V)
	150.0Ah	138 .0Ah	127.5Ah	90.0Ah
Max.discharge current	1500A(5 Sec.)			
Internal Resistance	Full charged at 25 ℃: Approx 7.5 mΩ			
Capacity affected by Temp. (20 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	
	14.10-14.40V(Initial charging current less than 55A)		13.50-13.80V	

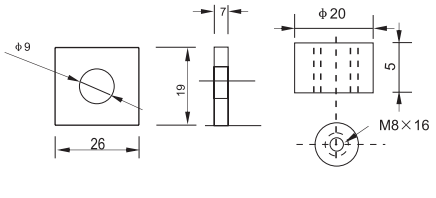
Outer dimensions (mm)







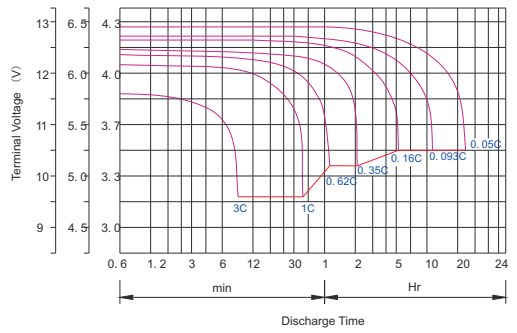
Terminal Type (mm)



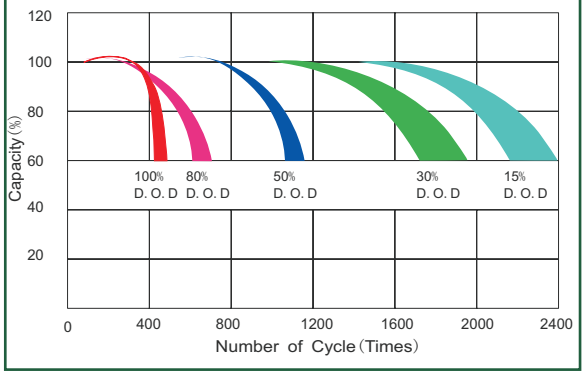
Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25℃ (77℉)

Time		5min	10min	15min	30min	1hr	2hr	3hr	4hr	5hr	8hr	10hr	20hr
9.60V	A	442.0	291.0	235.0	157.0	83.0	48.0	35.5	27.6	22.8	16.1	14.5	7.8
	W	4562.0	3110.0	2517.0	1692.0	894.0	530.0	394.7	310.5	258.9	185.0	167.4	91.0
10.20V	A	428.0	263.0	221.0	150.0	78.0	46.0	34.5	26.9	22.4	15.7	14.2	7.6
	W	4572.0	2934.0	2474.0	1689.0	880.0	531.0	399.5	312.9	260.6	184.1	167.0	89.0
10.50V	A	414.0	235.0	193.0	141.0	75.0	45.0	33.7	26.5	22.1	15.6	13.9	7.6
	W	4522.0	2674.0	2206.0	1620.0	873.0	522.0	392.3	310.0	258.9	183.4	164.9	89.7
10.80V	A	399.0	221.0	180.0	130.0	73.0	44.0	32.8	26.1	21.5	15.2	13.8	7.5
	W	4478.0	2554.0	2070.0	1503.0	848.0	514.0	387.2	308.0	254.5	179.9	164.0	88.8
11.10V	A	386.0	208.0	166.0	116.0	70.0	43.0	31.7	25.4	21.0	14.8	13.1	7.0
	W	4374.0	2403.0	1931.0	1356.0	828.0	506.0	377.1	302.4	250.3	176.8	158.3	85.3

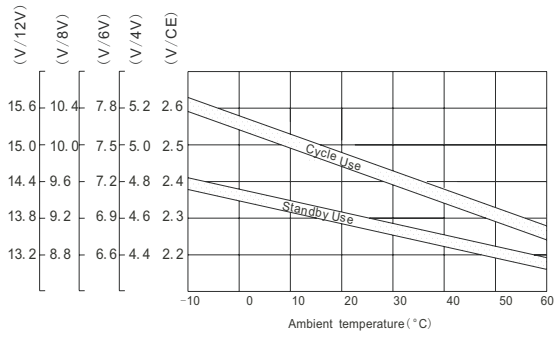
Discharge characteristic Curve



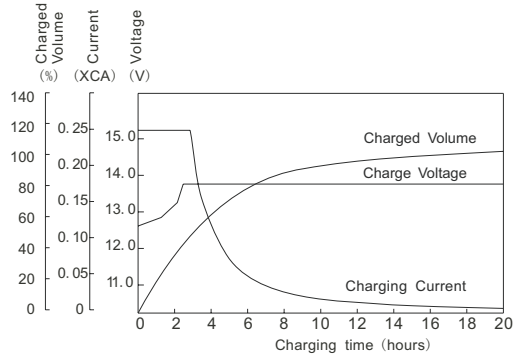
Cycle service life in relation to depth of discharge



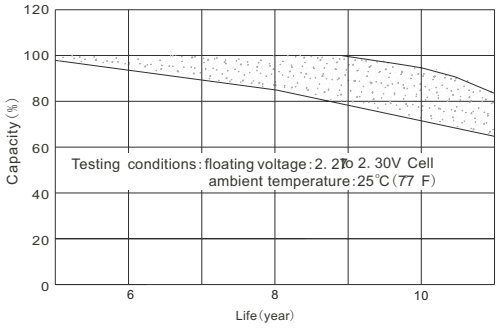
Relationship between charging voltage and temperature



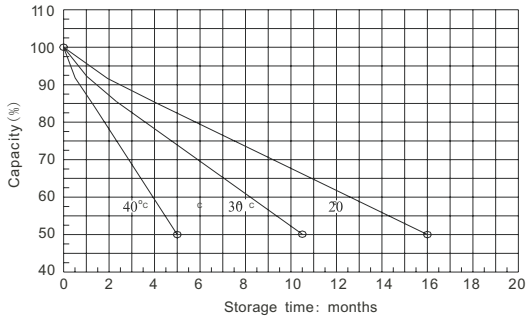
Constant voltage charging characteristic (0.25CA, at 25℃)



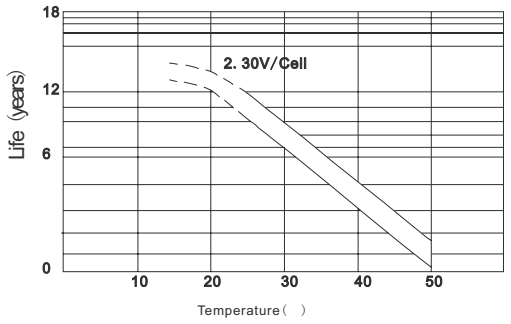
Life characteristics of standby use



Self-discharge characteristic



Temperature effects on float life



Charge characteristic Curve for standby use