NAPEL POWER NP12900G(12V90Ah)

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
*Solar power and wind power systems
*Power tools
*Power station
*Marine equipment
*Fire and Security System
*Electric vehicle and wheelchairs etc.

General Features

*Safety Sealing
*Non-spillable construction
*High Reliability and Stability
*Sealed and Maintenance-free
*Safety and Quality certification
*Longer Life in deep cycle application

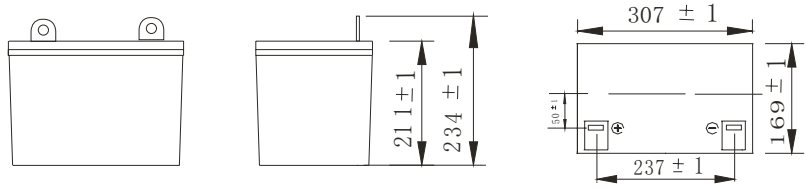
Construction

*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

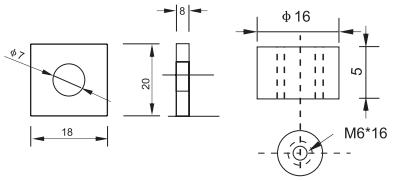
Specification

Battery Model	Nominal Voltage	12V		
	Rated capacity(20 Hour rate)	90Ah		
Dimensions	Length	Width	Height	Total Height
	307mm (12.09 inches)	169mm(6.65inches)	211mm(8.31 inches)	234mm(9.21inches)
Approx Weight	27.5kg(60.63lbs) ±3%			
Capacity 25℃ (77℉)	20 Hour (4.5A,10.8V)	10 Hour(8.3A,10.5V)	5 Hour (15.3A,10.2V)	1 Hour (54.0A,9.6V)
	90.0Ah	83.0Ah	76.5Ah	54.0Ah
Max.discharge current	900A(5 Sec.)			
Internal Resistance	Full charged at 25 ℃: Approx 4.6mΩ			
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	
	14.1-14.4V (Initial charging current less than 36A)		13.50-13.80V	

Outer dimensions (mm)



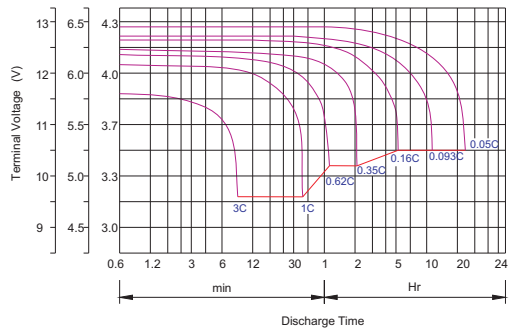
Terminal Type (mm)



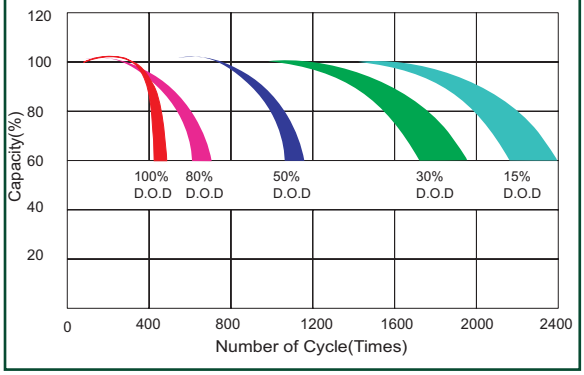
Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25℃ (77℉)

Time		5min	10min	15min	30min	1hr	2hr	3hr	4hr	5hr	8hr	10hr	20hr
9.60V	A	288.00	190.00	153.00	103.00	54.00	32.00	23.10	18.00	14.90	10.50	9.50	5.10
	W	2975.00	2028.00	1641.00	1103.00	583.00	346.00	257.40	202.50	168.80	120.70	109.10	59.30
10.20V	A	279.00	171.00	144.00	98.00	51.00	30.00	22.50	17.60	14.60	10.30	9.30	5.00
	W	2982.00	1913.00	1613.00	1101.00	574.00	346.00	260.60	204.10	170.00	120.00	108.90	58.10
10.50V	A	270.00	153.00	126.00	92.00	49.00	29.00	22.00	17.30	14.40	10.20	9.10	5.00
	W	2949.00	1744.00	1439.00	1056.00	569.00	340.00	255.90	202.20	168.80	119.60	107.60	58.50
10.80V	A	260.00	144.00	117.00	85.00	48.00	29.00	21.40	17.00	14.00	9.90	9.00	4.90
	W	2920.00	1666.00	1350.00	980.00	553.00	335.00	252.50	200.90	166.00	117.30	107.00	57.90
11.10V	A	252.00	135.00	108.00	76.00	46.00	28.00	20.70	16.60	13.70	9.60	8.60	4.60
	W	2853.00	1567.00	1259.00	885.00	540.00	330.00	245.90	197.20	163.30	115.30	103.20	55.60

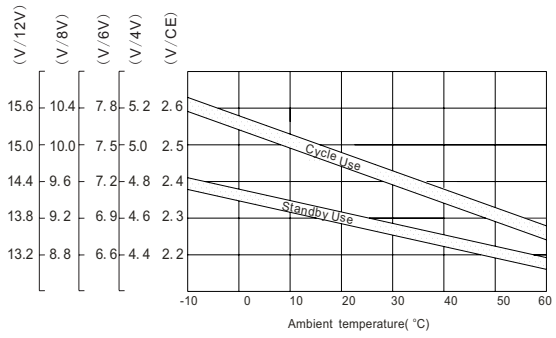
Discharge characteristic Curve



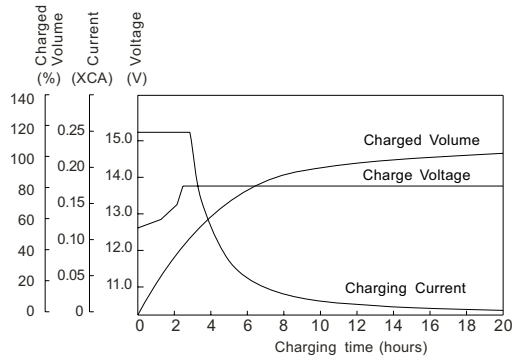
Cycle service life in relation to depth of discharge



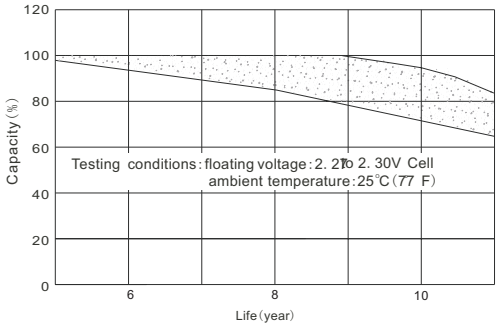
Relationship between charging voltage and temperature



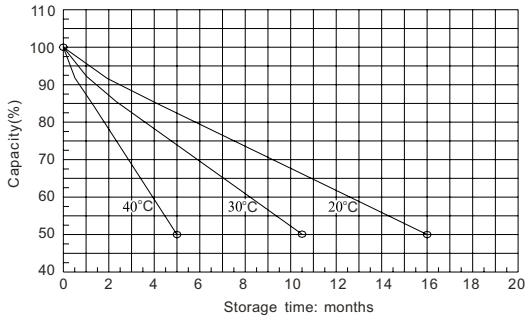
Constant voltage charging characteristic (0.25CA, at 25 C) °



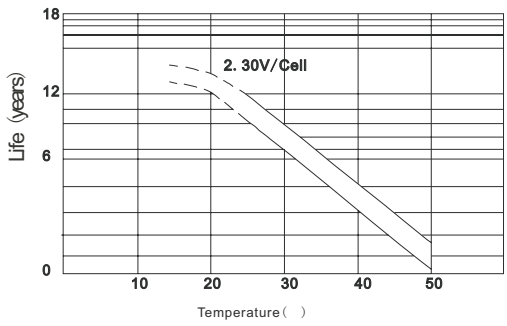
Life characteristics of standby use



Self-discharge characteristic



Temperature effects on float life



Charge characteristic Curve for standby use