NOLLON™
Achieve Wattever. Whenever.

AGM BATTERY
NP Series

NP 1272A (12V 7.2Ah)



Applications

- All purpose
- Uninterruptible Power Supply (UPS)
- Electric Power System (EPS)
- Emergency Light
- Emergency backup power supply
- Auto control system
- Aircraft signal
- Alarm and security system
- Electronic apparatus and equipment
- DC power supply
- Communication power supply
- Network communication

Battery Construction

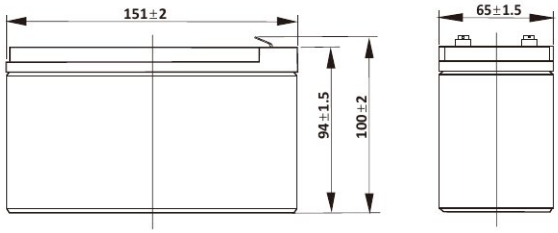
COMPONENT	POSITIVE PLATE	NEGATIVE PLATE	CONTAINER	COVER	SAFETY VALVE	TERMINAL	SEPARATOR	ELECTROLYTE
Raw material	Lead dioxide	Lead	ABS	ABS	Rubber	Copper/Plug	Fiberglass	Sulfuric acid

Performance Characteristics

- ***Nominal Voltage*** 12V
- ***Number of Cell*** 6
- ***Nominal Capacity (77°F /25°C)***
  - *20 Hour rate (0.361A, 10.2V)* 7.22Ah
  - *10 Hour rate (0.676A, 10.5V)* 6.76Ah
  - *5 Hour rate (1.208A, 10.5V)* 6.04Ah
  - *1 Hour rate (4.550A, 9.6V)* 4.55Ah
- ***Internal Resistance***
  - *Fully charged battery (77°F /25°C)* 20mΩ
- ***Capacity affected by temperature (10 hour rate)***
  - *104°F (40°C)* ..... 107% *32°F (0°C)* 76%
  - *77°F (25°C)* ..... 100% *5°F (-15°C)* 60%
- ***Self-Discharge 68°F (20°C)***
  - *Capacity after 3 month storage* 90%
  - *Capacity after 6 month storage* 80%
  - *Capacity after 12 month storage* 60%
- ***Max. discharge current 77°F /25°C*** ..... 105A(5s)
- ***Charge Methods: constant voltage charge 77°F /25°C***
  - *Cycle use* ..... 14.7 ~ 15.0V
  - *Max. Current* 1.4A
  - *Standby use* ..... 13.5 ~ 13.8V

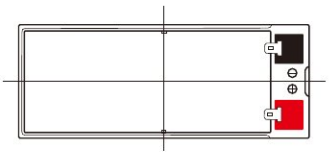
General Features

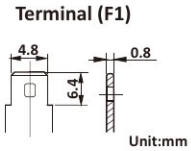
- ***Oxygen recombination technology means the battery is maintenance free and no water adding required.***
- ***Not restricted for air transportation as Nollon Battery complies with IATA/ICAO special provision A67.***
- ***Raw material used in Nollon battery is of CE and UL (MH49077) standards.***
- ***Computer designed lead-calcium tin plate grid alloy provides high power density and less gassing.***
- ***ABS case (optional for Fire Retardant case).***
- ***Sealed valve regulated thus allowing installa?on horizontally or vertically.***
- ***Spill/leak proof and vibration resistant.***
- ***Long service life for float or cyclic applications.***
- ***Design life 5 years***



Dimensions and Weight

Type	Length	Width	Height	Total Height	Approx. Weight
SI Units	151mm	65mm	94mm	100mm	2.00Kg
English Units	5.94inch	2.56inch	3.70inch	3.94inch	4.41lbs





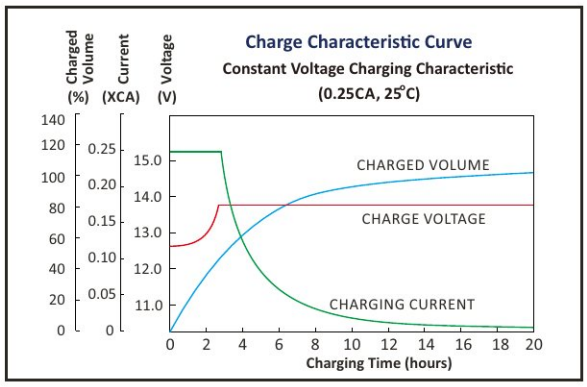
Constant Current Discharge (Amperes at 77°F/25°C)

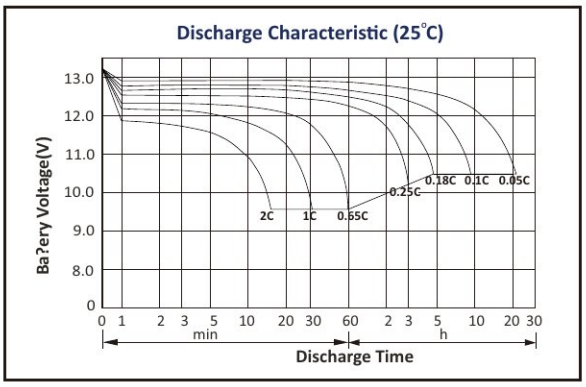
V/cell	5min	10min	15min	30min	1h	3h	5h	10h	20h
1.60	27.62	18.10	13.48	7.175	4.550	1.831	1.235	0.700	0.375
1.65	26.34	17.44	13.10	7.070	4.500	1.808	1.226	0.692	0.368
1.70	25.06	16.77	12.71	6.965	4.449	1.785	1.217	0.683	0.361
1.75	22.51	15.72	12.01	6.755	4.393	1.768	1.208	0.676	0.354
1.80	20.20	14.70	11.31	6.545	4.330	1.747	1.194	0.665	0.340

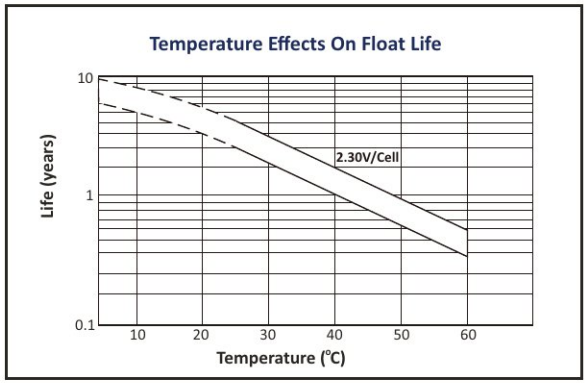
Constant Power Discharge (Watts/cell at 77°F/25°C)

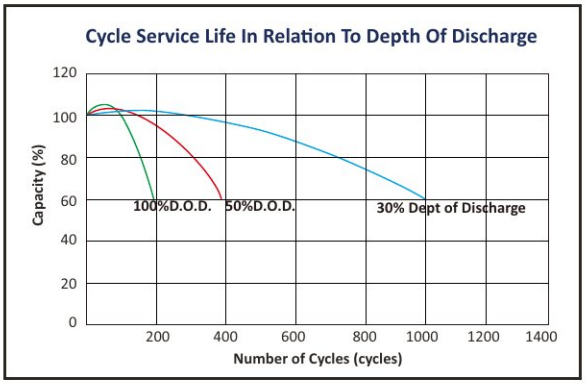
V/cell	5min	10min	15min	30min	1h	3h	5h	10h	20h
1.60	49.94	33.02	24.82	13.69	9.024	3.649	2.463	1.398	0.749
1.65	48.05	32.09	24.32	13.55	8.942	3.607	2.446	1.382	0.737
1.70	46.15	31.15	23.82	13.41	8.860	3.564	2.429	1.365	0.724
1.75	42.01	29.73	22.71	13.12	8.756	3.532	2.413	1.352	0.710
1.80	38.03	28.05	21.57	12.82	8.637	3.493	2.387	1.331	0.682

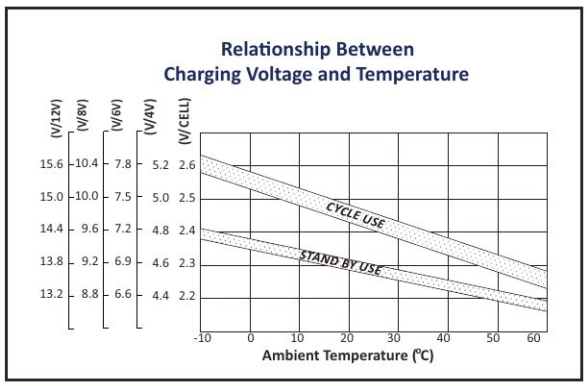
(Note: The above characteristics data are average values obtained within three charge/discharge cycles not the minimum values.)

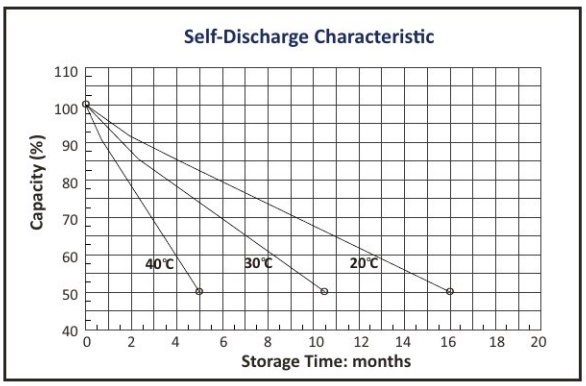

Charge Characteristic Curve
Constant Voltage Charging Characteristic
(0.25CA, 25°C)
Charged Volume (%)
Current (XCA)
Voltage (V)
CHARGED VOLUME
CHARGE VOLTAGE
CHARGING CURRENT
Charging Time (hours)

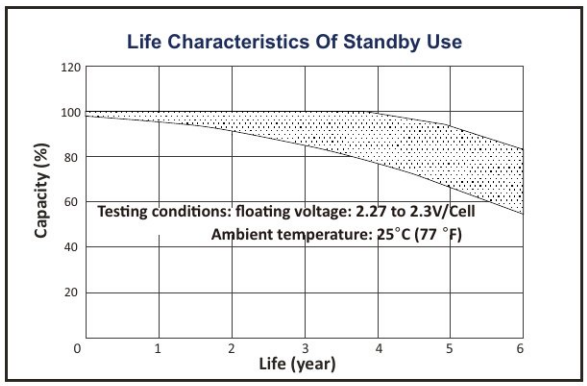

Discharge Characteristic (25°C)
Battery Voltage(V)
0.25C
0.18C
0.1C
0.05C
2C
1C
0.65C
min
h
Discharge Time

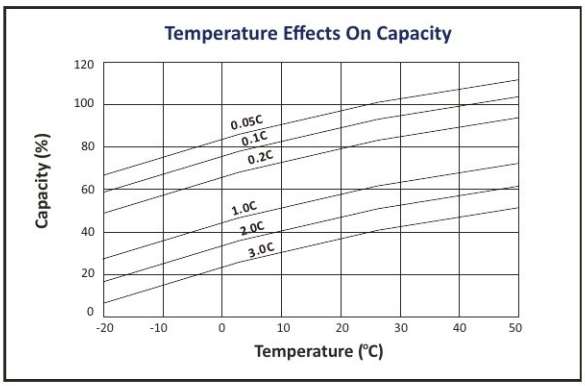

Temperature Effects On Float Life
Life (years)
2.30V/Cell
Temperature (°C)


Cycle Service Life In Relation To Depth Of Discharge
Capacity (%)
100%D.O.D.
50%D.O.D.
30% Dept of Discharge
Number of Cycles (cycles)


Relationship Between
Charging Voltage and Temperature
(V/12V)
(V/8V)
(V/6V)
(V/4V)
(V/CELL)
CYCLE USE
STAND BY USE
Ambient Temperature (°C)


Self-Discharge Characteristic
Capacity (%)
40°C
30°C
20°C
Storage Time: months


Life Characteristics Of Standby Use
Capacity (%)
Testing conditions: floating voltage: 2.27 to 2.3V/Cell
Ambient temperature: 25°C (77 °F)
Life (year)


Temperature Effects On Capacity
Capacity (%)
0.05C
0.1C
0.2C
1.0C
2.0C
3.0C
Temperature (°C)