



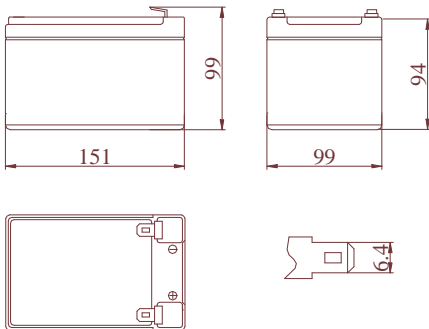
NP1212 12V12Ah



The battery is constructed by plates, separators, safety valves and container.

Since the electrolyte is held by a glassmat separator and plates, the battery can use in any direction and position without leakage.

Outer Dimensions



Dimensions and Weight

Length (mm / inch)	151 / 5.94
Width (mm / inch)	99 / 3.90
Height (mm / inch)	94 / 3.70
Total Height (mm / inch)	99 / 3.90
Approx.Weight(Kg / lbs)	3.80 / 8.36

Performance Characteristics

Nominal Voltage	12V
Number of cell	6
Design Life	5 years
Nominal Capacity 77°F(25°C)	
20 hour rate(0.60A,10.5V)	12.Ah
10 hour rate(1.12A,10.5V)	11.2Ah
5 hour rate (2.04 A,10.5V)	10.2Ah
1 hour rate(7.8A,9.6V)	7.8Ah
Internal Resistance	
Fully Charged battery 77°F(25°C)	30 mΩ
Self-Discharge	
3% of capacity declined per month at 20°C(average)	
Operation Temperature Range	
Discharge	-20~60°C
Charge	-10~60°C
Storage	-20~60°C
Max.Discharge Current 77°F(25°C)	144A(5s)
Short Circuit Current	180A

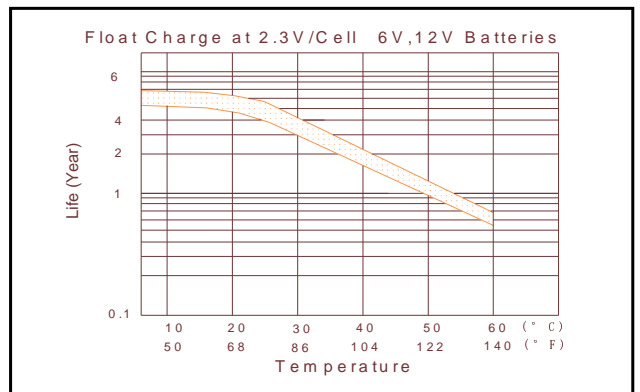
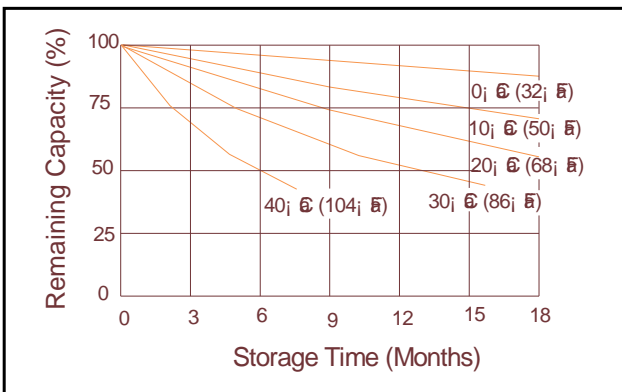
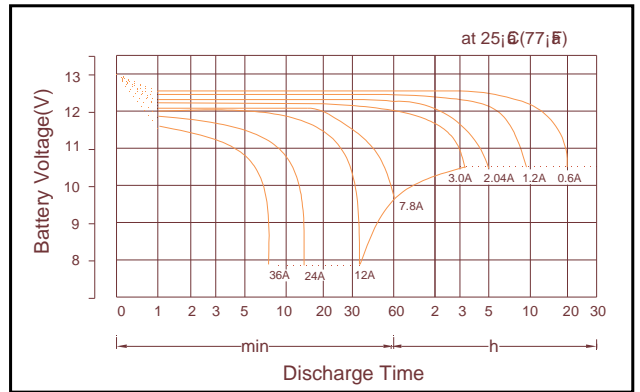
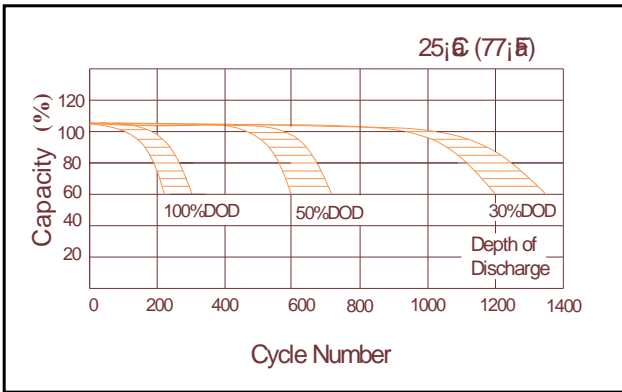
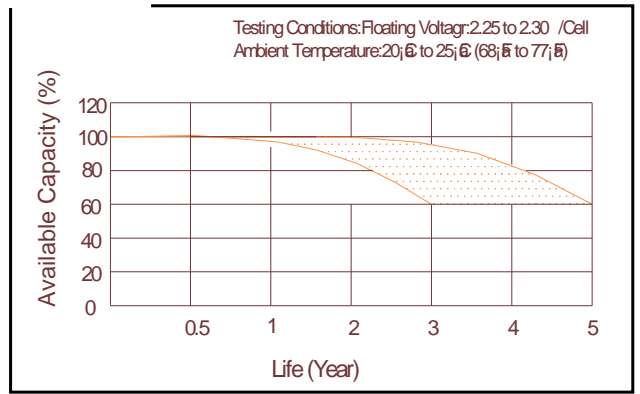
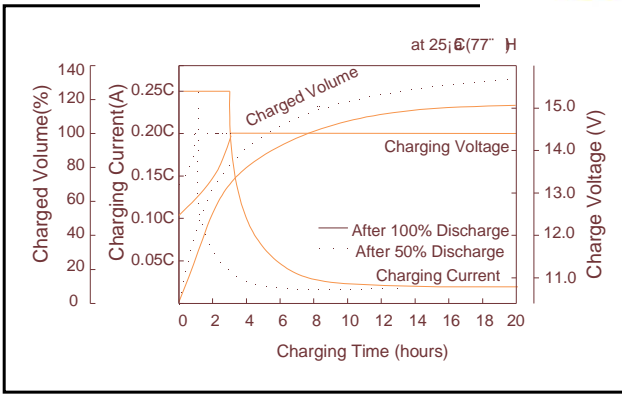
Battery Construction

COMPONENT	Positive plate	Negative plate	Container	Cover	Safety valve	Terminal	Separator	Electrolyte
RAW MATERIAL	Lead dioxide	Lead	ABS	ABS	Rubber	Copper	Fiberglass	Sulfuric acid

Charging Methods

Application	Charging method	Charging Voltage at 25°C	Temperature compensation coefficient of charging voltage	Max.charging current	Charging time 25°C(h)		Temp (°C)
					100% discharge	50% discharge	
For standby power source	Constant voltage & Constant Current Charging (with current restriction)	13.4-13.8V	-18 mV/°C	3.6A	24	20	0~40 (32~104°F)
For cycle service		14.5-15.0V	-30 mV/°C	3.6A	16	10	

*Temperature compensation of charging voltage is not needed when using the batteries within 15°C to 35°C range.



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

F.V/Time	5min	10min	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h
9.60V	42.0	33.6	24.0	13.8	9.84	7.80	4.20	3.04	2.06	1.36	1.13	0.61
9.90V	40.8	32.4	22.8	13.6	9.72	7.74	4.16	3.02	2.05	1.36	1.13	0.60
10.20V	38.4	30.0	21.6	13.2	9.60	7.68	4.14	3.00	2.04	1.34	1.12	0.60
10.50V	33.6	25.2	20.4	12.5	9.48	7.56	4.08	2.96	2.04	1.33	1.12	0.60
10.80V	30.0	21.6	19.2	10.8	9.36	7.44	3.96	2.88	2.02	1.33	1.09	0.59

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

F.V/Time	5min	10min	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h
9.60V	458	368	265	161	112	90.0	48.4	35.2	23.9	15.8	13.2	7.20
9.90V	440	353	251	155	111	88.8	48.1	34.9	23.8	15.7	13.1	7.20
10.20V	419	332	239	148	109	88.8	47.6	34.8	23.6	15.7	13.1	7.14
10.50V	367	280	226	139	108	87.0	47.0	34.3	23.6	15.5	13.0	6.96
10.80V	328	252	212	120	107	85.8	45.6	33.4	23.4	15.5	12.7	6.84

