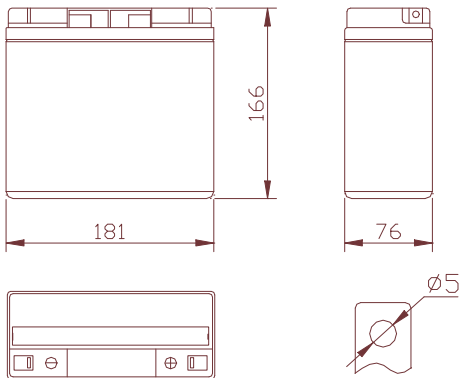


The battery is constructed by plates, separators, safety valves and container.

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 ).....	181 / 7.73
Width ( mm / inch ) .....	76 / 2.99
Height ( mm / inch ) .....	166 / 6.54
Total Height ( mm / inch ).....	166 / 6.54
Approx.Weight( Kg / lbs ).....	5.45 / 12.0

**Performance Characteristics**

Nominal Voltage .....	12V
Number of cell .....	6
Design Life .....	5 years
Nominal Capacity 77°F(25°C)	
20 hour rate(0.9A,10.5V) .....	18Ah
10 hour rate(1.67A,10.5V) .....	16.7Ah
5 hour rate (3.06 A,10.5V) .....	15.3Ah
1 hour rate(11.6A,9.6V) .....	11.6Ah
Internal Resistance	
Fully Charged battery 77°F(25°C) .....	15 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) .....	216A(5s)
Short Circuit Current .....	270A

**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**

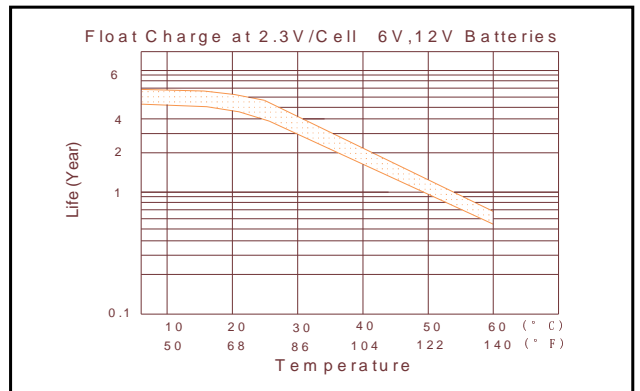
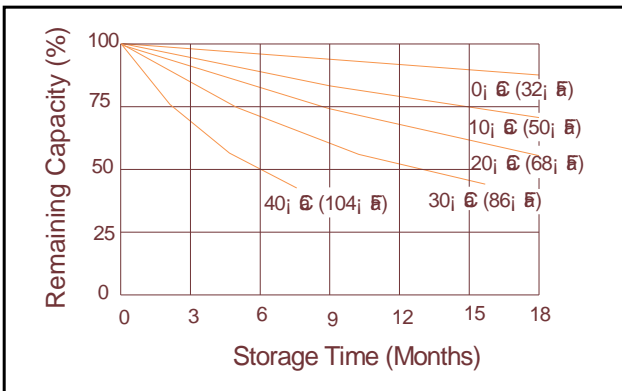
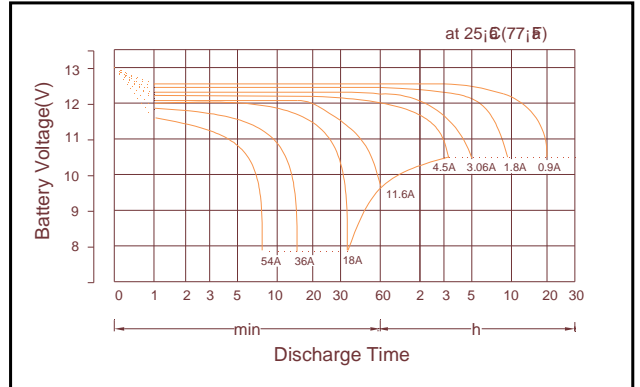
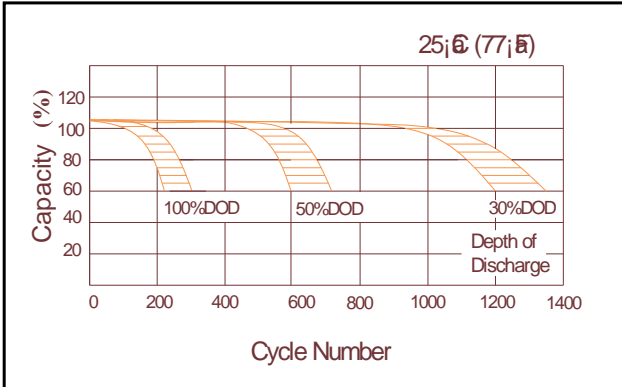
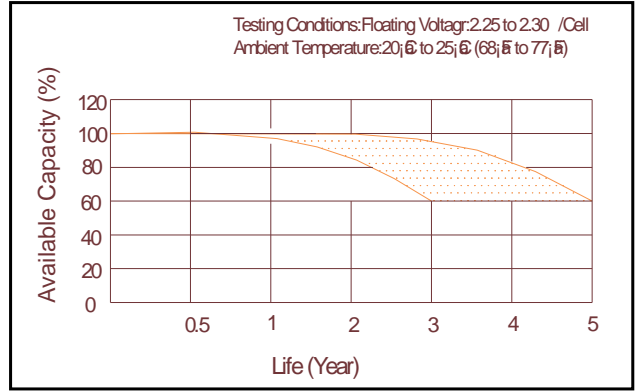
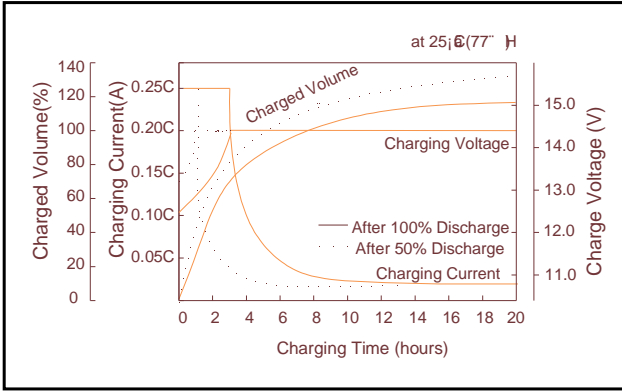
Application	Charging method	Charging Voltage at 25°C	Temperature compensation coefficient of charging voltage	Max.charging current	Charging time 25°C(h)		Temp (°C)
					100% discharge	50% discharge	
For standby power source	Constant voltage & Constant Current Charging (with current restriction)	13.4-13.8V	-18 mV/°C	5.4A	24	20	0~40 (32~104°F)
For cycle service		14.5-15.0V	-30 mV/°C	5.4A	16	10	

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



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**NP1218 12V18Ah**



**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	63.0	50.4	36.0	20.8	14.7	11.8	6.30	4.55	3.09	2.03	1.69	0.92
9.90V	61.2	48.6	34.2	20.3	14.6	11.6	6.25	4.53	3.08	2.03	1.69	0.92
10.20V	57.6	45.0	32.4	19.8	14.4	11.5	6.22	4.50	3.06	2.01	1.67	0.90
10.50V	50.4	37.8	30.6	18.7	14.2	11.3	6.12	4.45	3.06	2.00	1.67	0.90
10.80V	45.0	32.4	28.8	16.2	14.1	11.1	5.94	4.32	3.03	2.00	1.64	0.88

**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	688	552	398	241	169	136	72.6	52.7	35.8	23.6	19.7	10.8
9.90V	660	529	376	233	166	133	72.6	52.4	35.6	23.6	19.6	10.8
10.20V	628	498	358	222	164	133	72.0	52.1	35.5	23.6	19.6	10.7
10.50V	551	420	338	208	162	131	70.8	51.5	35.5	23.3	19.4	10.5
10.80V	492	378	319	181	160	128	68.4	50.0	35.2	23.3	19.1	10.3

