

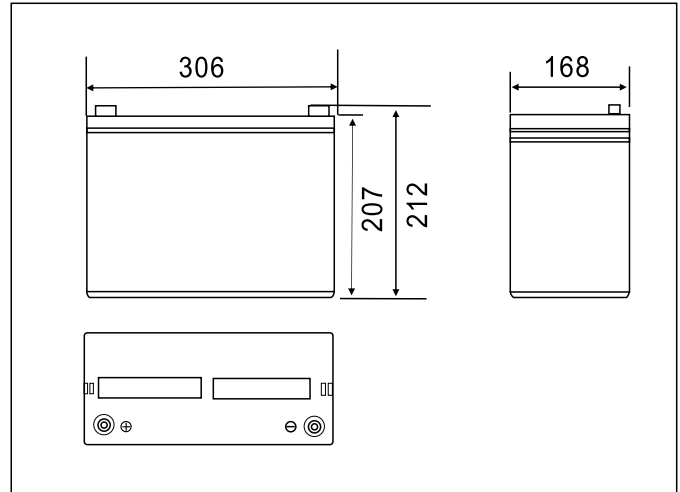
● Applications

- Electric tools
- Electric toys
- Emergency lighting
- Electronic instruments
- Medical equipment
- Alarm and security systems
- Solar power systems
- Wind power systems
- Telecommunication equipments
- Uninterruptible power supplies

● Specifications

Nominal Voltage		12V
Rated Capacity (10 hour rate)		90Ah
Dimensions	Total Height	212±2mm(8.35inches)
	Height	207±2mm(8.16 inches)
	Length	306±2mm(12.05 inches)
	Width	168±2mm(6.61 inches)
Weight Approx		26.3kg(55.36 lbs)±4%

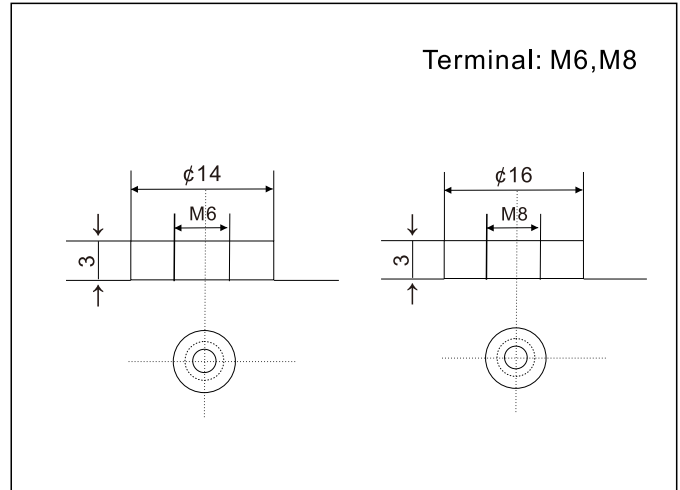
● Outer Dimensions (mm)



● Characteristics

Capacity 25°C(77°F)	10 hour rate(9.0A) 5 hour rate(16A) 1 hour rate(55A)	90 AH 80 AH 55AH
Internal Resistance	Full charged Battery at 25°C(77°F)	5mΩ
Capacity affected by Temperature (10hour rate)	40°C(104°F)	102%
	25°C(77°F)	100%
	0°C(32°F)	85%
	-15°C(5°F)	65%
Self-Discharge at 25°C(77°F)	Capacity after 3 month storage	91%
	Capacity after 6 month storage	82%
	Capacity after 12 month storage	64%
Charge (constant voltage)	Cycle	Initial Charging Current Less than 22.5 A Voltage 14.50-14.90V
	Float	Voltage 13.50-13.80V

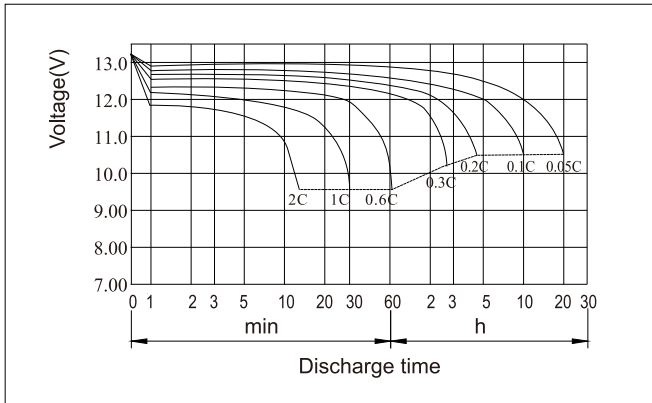
● Terminal Type (mm)



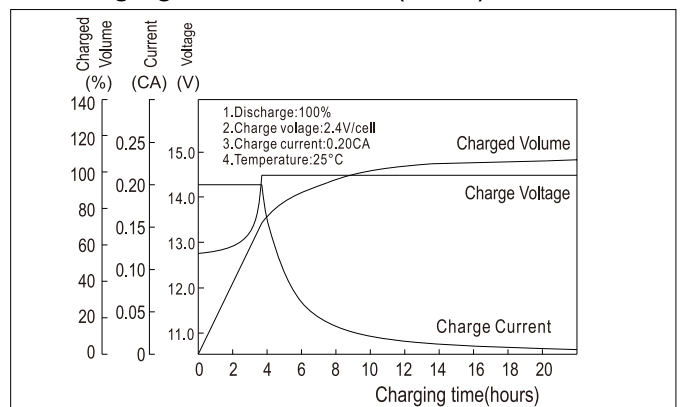
Constant Current(AMP) and Constant Power(Watt) Characteristics at 25°C(77°F)

F.V/TIME	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
9.60V	A	193	150	90.5	55.6	32.9	23.0	18.8	16.1	11.0	4.81
	w	2082	1647	1015	634	381	270	221	190	131	57.7
9.90V	A	187	146	88.6	54.8	32.7	22.8	18.7	16.0	11.0	4.80
	w	2020	1607	995	625	379	268	220	189	130	57.6
10.20V	A	179	141	85.9	53.4	32.4	22.7	18.6	15.9	10.9	4.79
	w	1936	1548	964	609	375	266	218	187	129	57.4
10.50V	A	172	136	83.8	52.3	31.9	22.5	18.5	15.8	10.8	4.76
	w	1835	1495	941	596	370	265	217	186	128	57.1
10.80V	A	162	129	80.8	50.7	31.1	21.8	17.9	15.3	10.5	4.73
	w	1749	1416	906	578	360	257	210	181	124	56.7

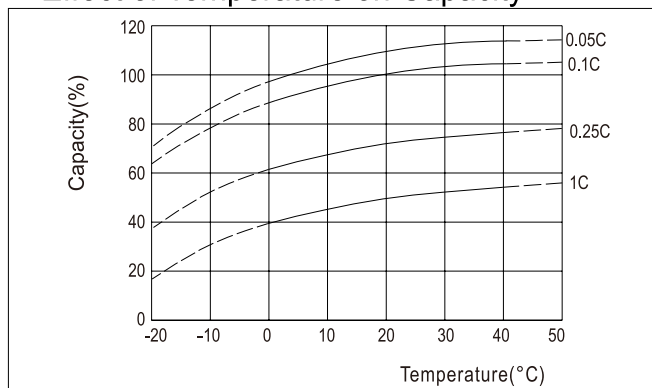
● Discharge Characteristics(25°C)



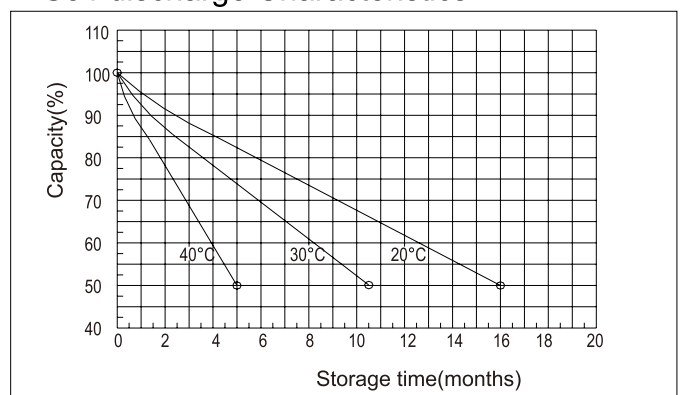
● Charging Characteristics(25°C)



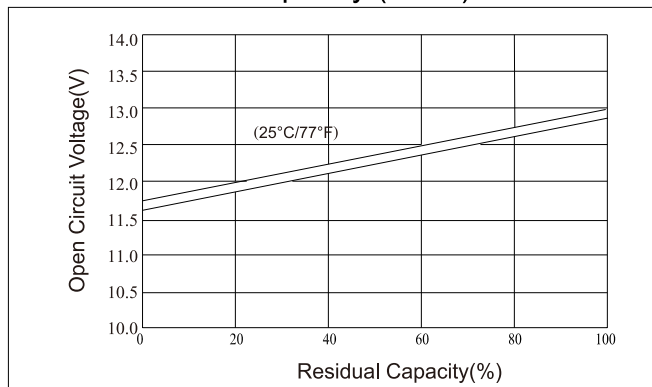
● Effect of Temperature on Capacity



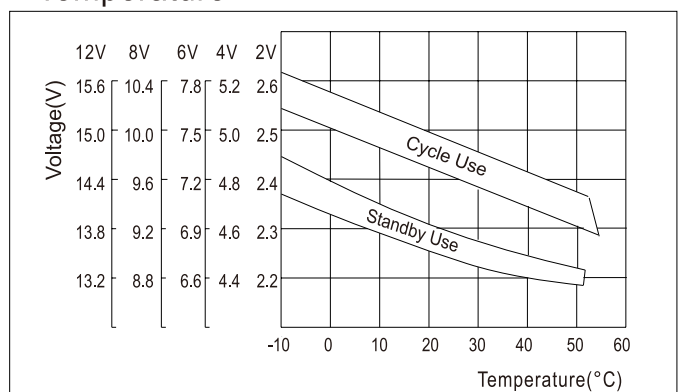
● Self-discharge Characteristics



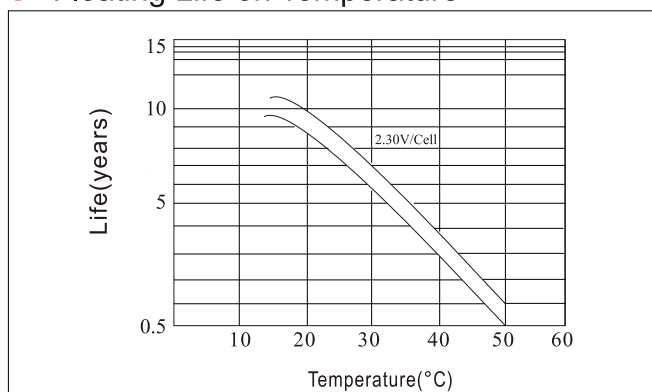
● The Relationship for Open Circuit Voltage and Residual Capacity (25°C)



● The Relationship for Charging Voltage and Temperature



● Floating Life on Temperature



● Cycle Life on D.O.D (25°C)

