

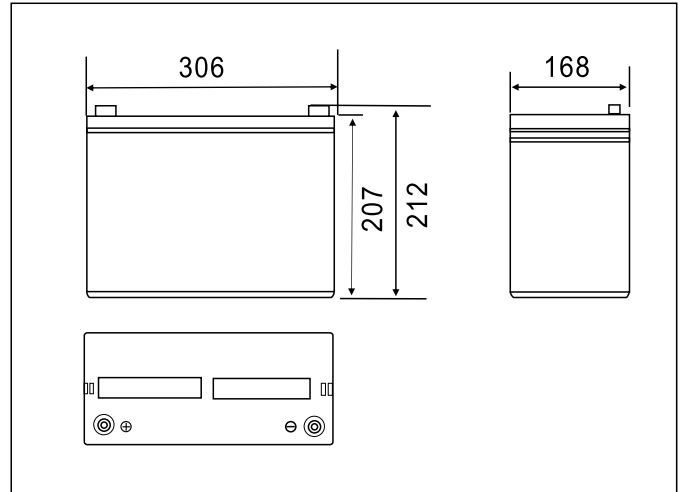
● Applications

- 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%

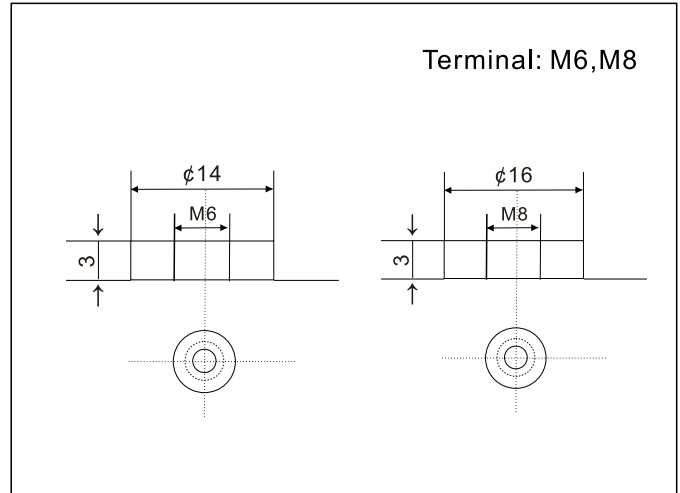
● Outer Dimensions (mm)



● 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

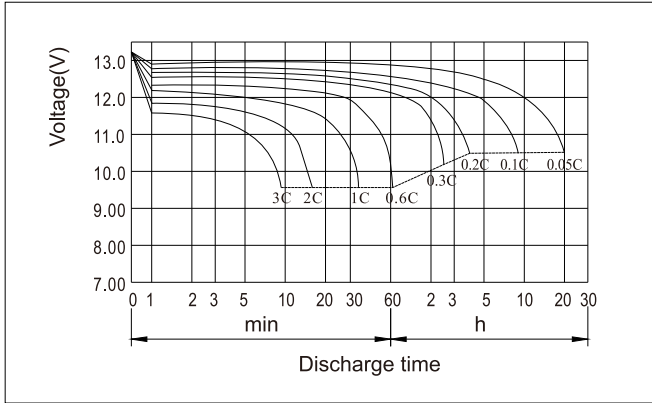
● Terminal Type (mm)



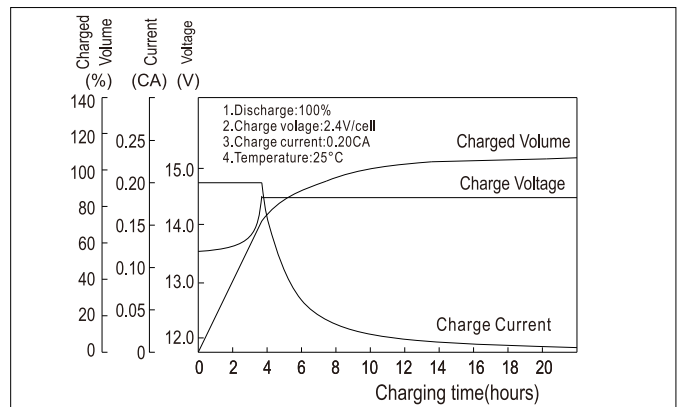
Constant Current(AMP) and Constant Power(Watt) Discharge Table at 25°C(77°F)

Time		10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
9.60V	A	189	149	90.0	55.8	32.9	23.0	18.8	16.1	11.0	9.16	4.81
	w	2041	1631	1010	636	381	270	221	190	131	109	57.7
9.90V	A	183	145	88.2	55.0	32.7	22.8	18.7	16.0	11.0	9.14	4.80
	w	1980	1591	990	627	379	268	220	189	130	109	57.6
10.20V	A	176	140	85.5	53.6	32.4	22.7	18.6	15.9	10.9	9.12	4.79
	w	1898	1533	959	611	375	266	218	187	129	109	57.4
10.50V	A	168	135	83.4	52.5	31.9	22.5	18.5	15.8	10.8	9.06	4.76
	w	1817	1481	936	599	370	265	217	186	128	108	57.1
10.80V	A	159	128	80.4	50.9	31.1	21.8	17.9	15.3	10.5	9.00	4.73
	w	1715	1402	902	580	370	257	210	181	124	107	56.7

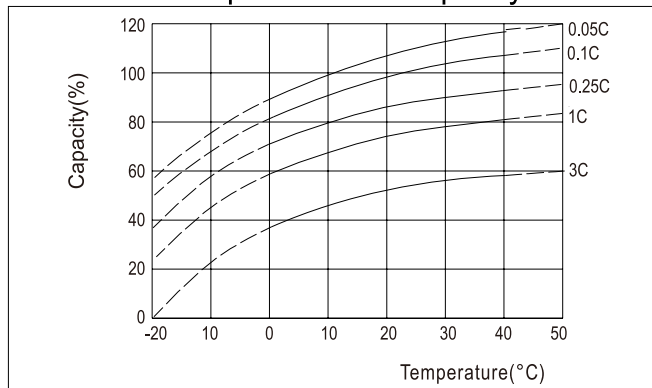
● Discharge Characteristics(25°C)



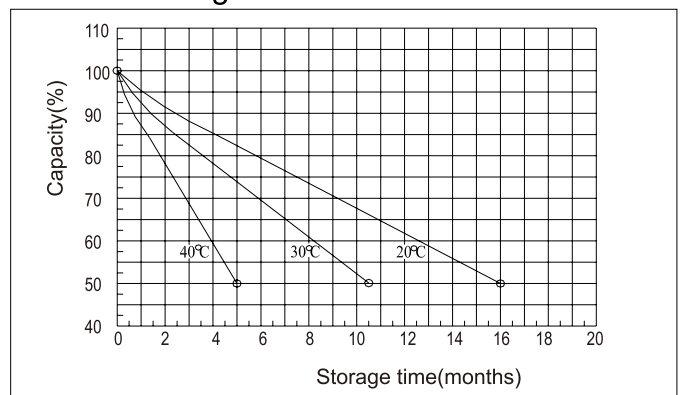
● Charging Characteristics(25°C)



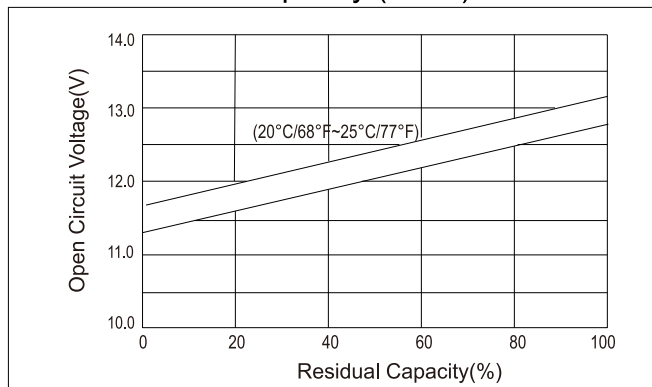
● Effect of Temperature on Capacity



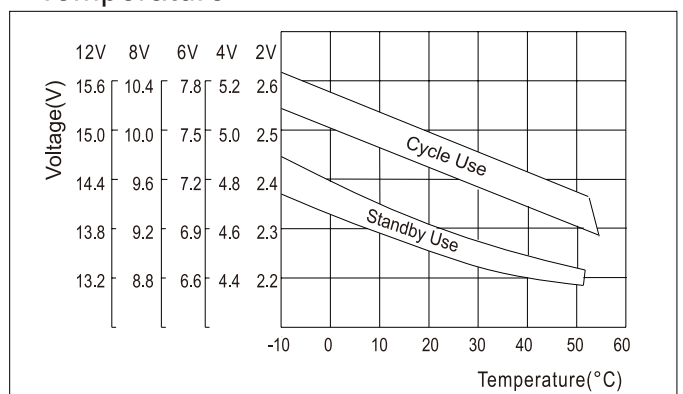
● Self-discharge Characteristics



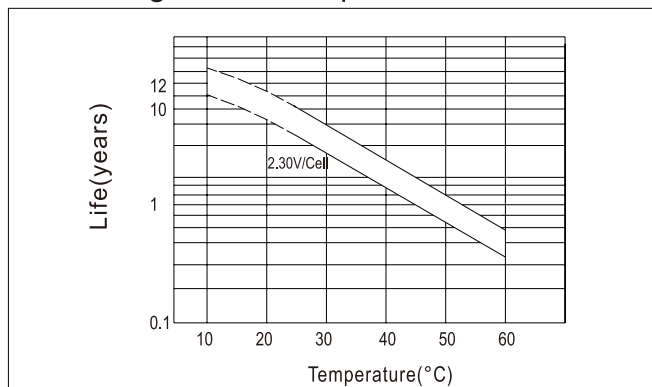
● The Relationship for Open Circuit Voltage and Residual Capacity (25°C)



● The Relationship for Charging Voltage and Temperature



● Floating Life on Temperature



● Cycle Life on D.O.D (25°C)

