



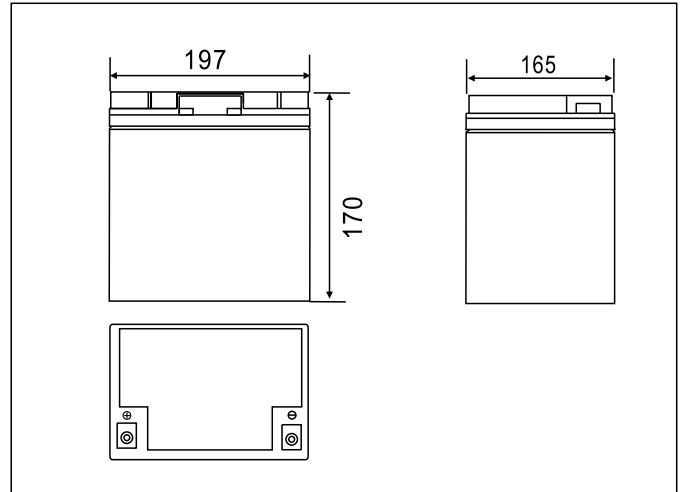
● Applications

- 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)		45Ah
Dimensions	Total Height	170±2mm(6.69 inches)
	Height	170±2mm(6.69 inches)
	Length	197±2mm(7.74 inches)
	Width	165±2mm(6.50 inches)
Weight Approx		13.2kg(29.04 lbs)±4%

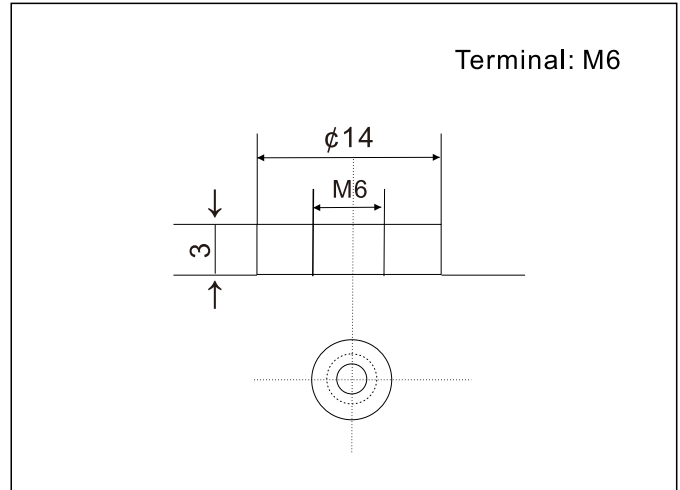
● Outer Dimensions (mm)



● Characteristics

Capacity 25°C(77°F)	10 hour rate(4.5A) 5 hour rate(8.0A) 1hour rate(27.9A)	45 AH 40AH 27.9AH
Internal Resistance	Full charged Battery at 25°C(77°F)	8mΩ
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 11.25 A Voltage 14.50-14.90V
	Float	Voltage 13.50-13.80V

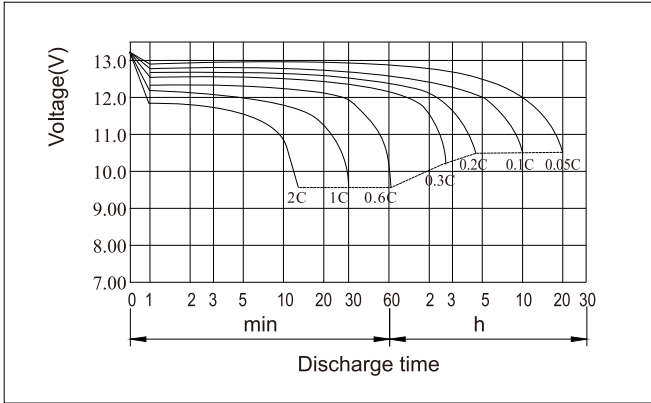
● Terminal Type (mm)



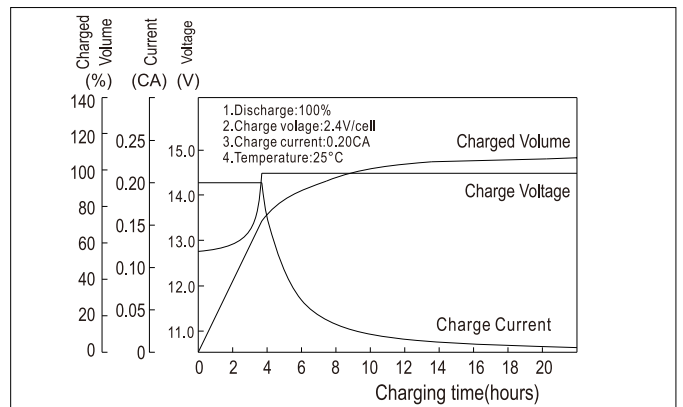
Constant Current(AMP) and Constant Power(Watt) Discharge Table at 25°C(77°F)

Time		10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
9.60V	A	111	86.54	52.74	29.25	17.49	12.08	10.01	8.43	5.75	4.77	2.55
	w	1182	943.4	591.8	338.1	206.2	143.7	119.3	100.5	68.7	57.1	30.5
9.90V	A	105.6	84.76	51.83	29.12	17.36	12.03	9.96	8.37	5.71	4.73	2.51
	w	1146	928.3	584.5	337.2	205.1	143.5	119.1	100.2	68.4	56.7	30.1
10.20V	A	101.9	83.43	50.48	28.85	17.23	11.94	9.91	8.34	5.66	4.68	2.45
	w	1116	917.8	576.4	334.4	203.8	143.2	118.9	99.9	67.9	56.2	29.5
10.50V	A	94.03	79.44	50.48	28.58	17.10	11.89	9.82	8.23	5.61	4.64	2.41
	w	1039	875.5	576.4	331.6	202.4	142.6	117.7	98.7	67.4	55.6	28.9
10.80V	A	85.74	73.23	49.62	27.90	16.79	11.57	9.59	8.08	5.52	4.59	2.36
	w	957.8	809.2	567.1	325.5	199.8	138.7	115.1	96.9	66.3	55.1	28.4

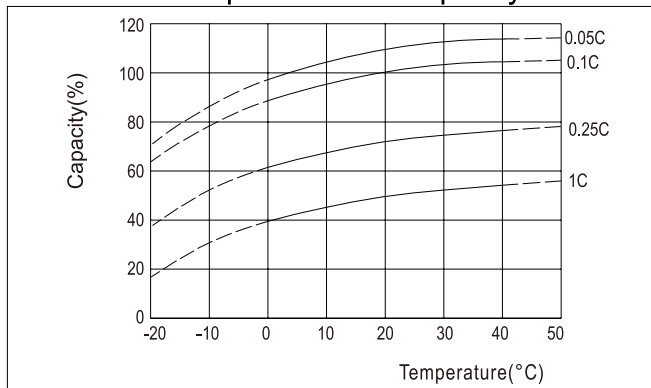
● Discharge Characteristics(25°C)



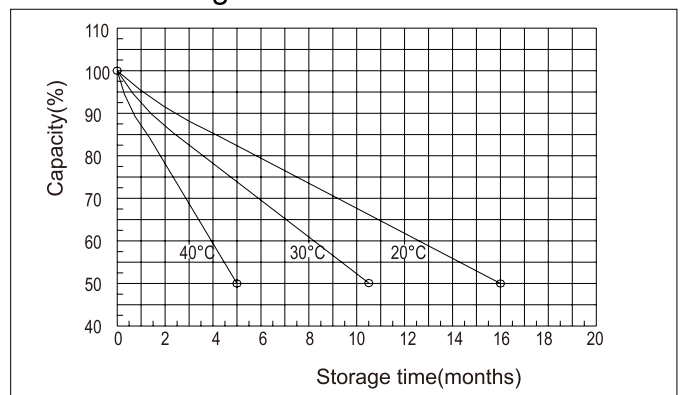
● Charging Characteristics(25°C)



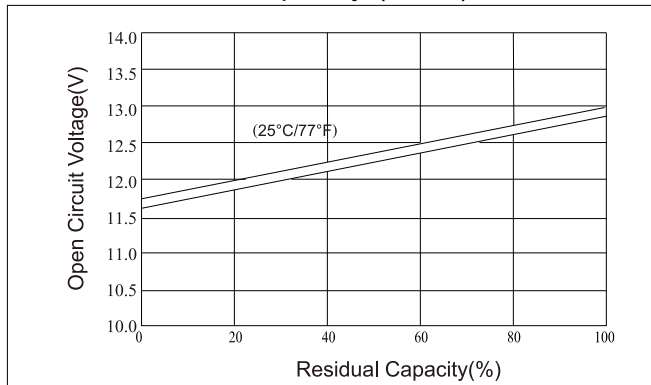
● Effect of Temperature on Capacity



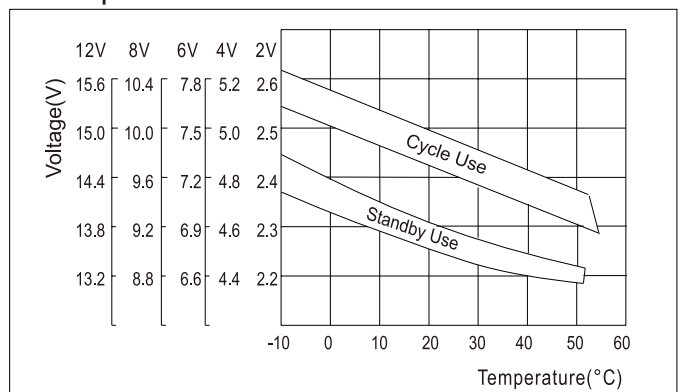
● Self-discharge Characteristics



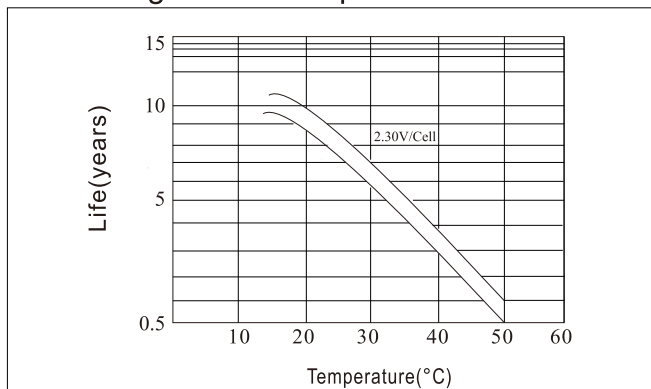
● The Relationship for Open Circuit Voltage and Residual Capacity (25°C)



● The Relationship for Charging Voltage and Temperature



● Floating Life on Temperature



● Cycle Life on D.O.D (25°C)

