

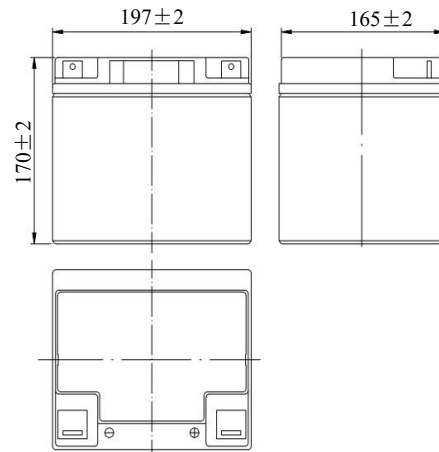
Specification

Nominal voltage	12V	
Capacity (25°C)	10HR(10.8V)	45Ah
	5HR(10.5V)	39Ah
	1HR(9.6V)	27Ah
Dimension	Length	197±2mm
	Width	165±2mm
	Height	170±2mm
	Total height	170±2mm
Approx. weight	13.2kg±4%	
Internal resistance (Fully charged,25°C)	Approx. 8mΩ	
Capacity affected by temperature(10HR)	40°C	102%
	25°C	100%
	0°C	85%
	-15°C	65%
Self-discharge(25°C)	3 months	Remaining capacity 91%
	6 months	Remaining capacity 82%
	12 months	Remaining capacity 65%
Nominal operating temperature	25±3°C	
Operating temperature range	Discharge	-15°C~50°C
	Charge	-10°C~50°C
	Storage	-20°C~50°C
Float charge voltage(25°C)	13.5V to 13.8V temperature compensation: -18mV/°C	
Cycle charge voltage(25°C)	14.5V to 14.9V temperature compensation: -30mV/°C	
Maximum charge current	13.5A	
Terminal & material	F4/F9; Copper	
Maximum discharge current	450A(5s)	
Designed floating life(20°C)	12 years	

Feature: Absorbent Glass Mat technology
ABS container; Battery recognized by CE
Sealed and Maintenance-free Operation

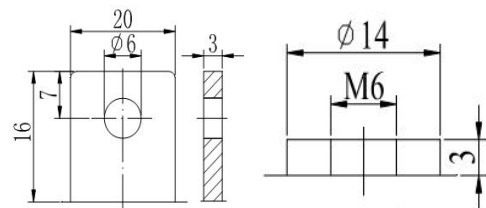


Dimension:



Terminal: F4 terminal

F9 terminal



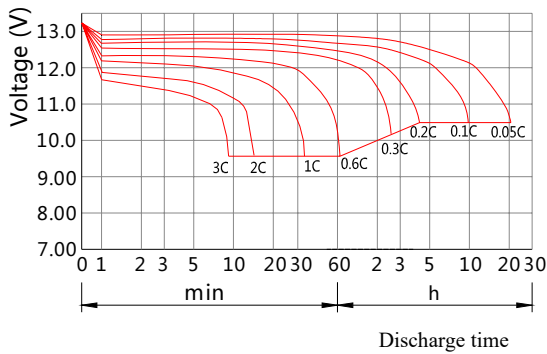
Constant Current discharge characteristics(A,25°C)

F.V/TIME	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	94.5	74.3	45.0	27.9	16.4	11.5	9.41	8.03	5.51	4.58	2.41
9.90V	91.7	72.5	44.1	27.5	16.3	11.4	9.35	7.99	5.48	4.57	2.40
10.2V	87.9	69.8	42.8	26.8	16.2	11.3	9.29	7.93	5.44	4.56	2.39
10.5V	84.1	67.4	41.7	26.3	16.0	11.3	9.23	7.88	5.40	4.53	2.38
10.8V	79.4	63.9	40.2	25.4	15.6	10.9	8.95	7.64	5.24	4.50	2.36

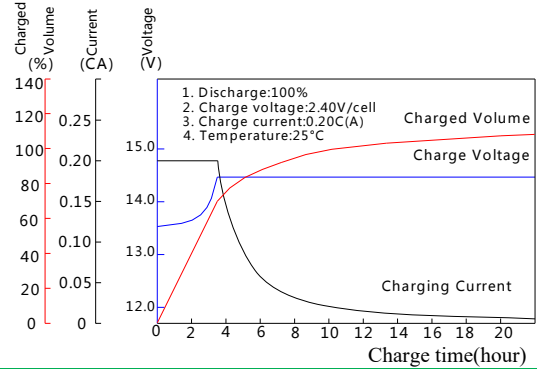
Constant Power discharge characteristics(W,25°C)

F.V/TIME	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	1021	815	505	318	190	135	111	94.9	65.4	54.7	28.9
9.90V	990	796	495	313	189	134	110	94.4	65.1	54.6	28.8
10.2V	949	766	480	305	188	133	109	93.7	64.6	54.4	28.7
10.5V	908	740	468	299	185	132	108	93.1	64.2	54.1	28.5
10.8V	857	701	451	290	180	128	105	90.3	62.2	53.7	28.4

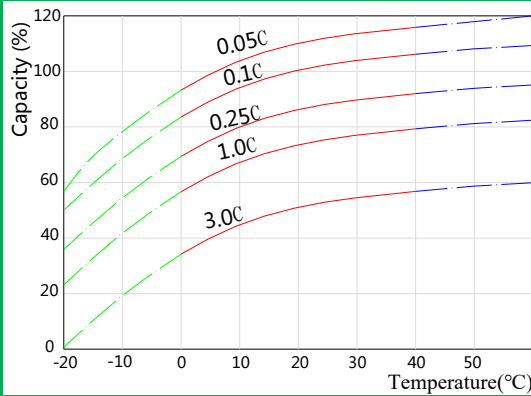
Discharge Characteristics(25°C)



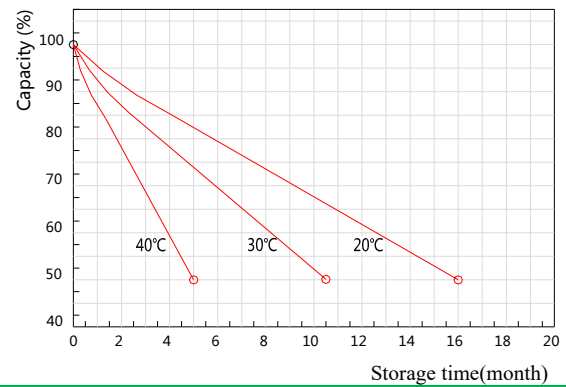
Charging Characteristics(25°C)



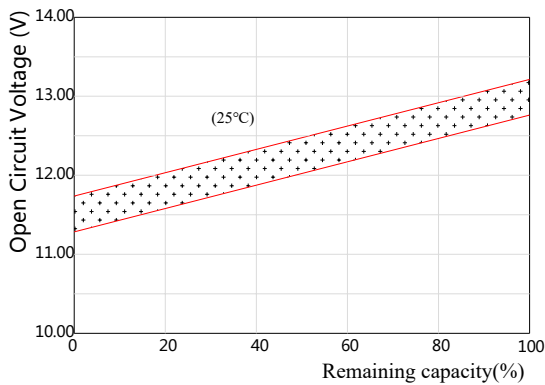
Effect of Temperature on Capacity



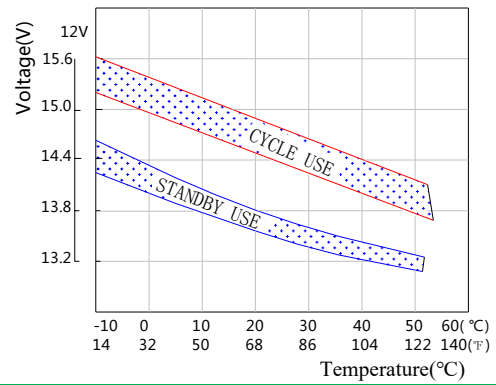
Self-discharge Characteristics



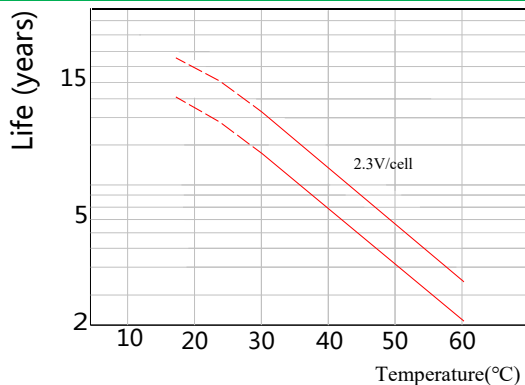
The Relationship of Open Circuit Voltage and Remaining Capacity (25°C)



The Relationship of Charge Voltage and Temperature



Floating Life on Temperature



Cycle Life on D.O.D(25°C)

