

VIGOR BATTERY

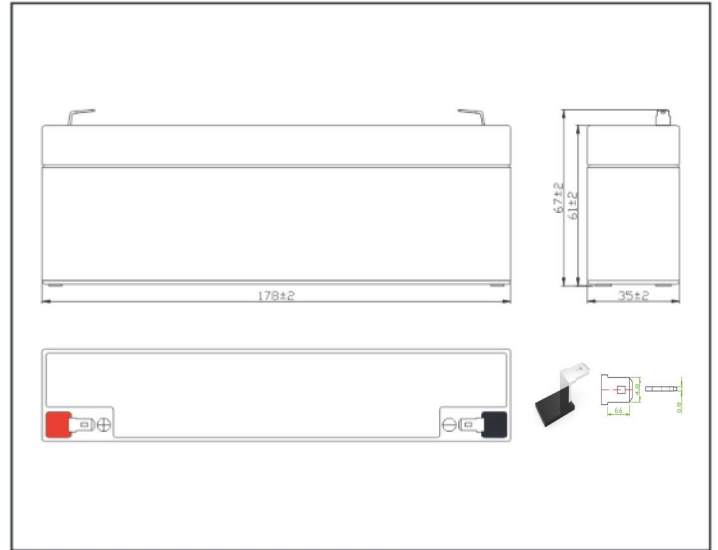
VALVE REGULATED LEAD ACID BATTERY

Model No : NP 2.3 -12 12 V 2.3 AH



Plane Chart:

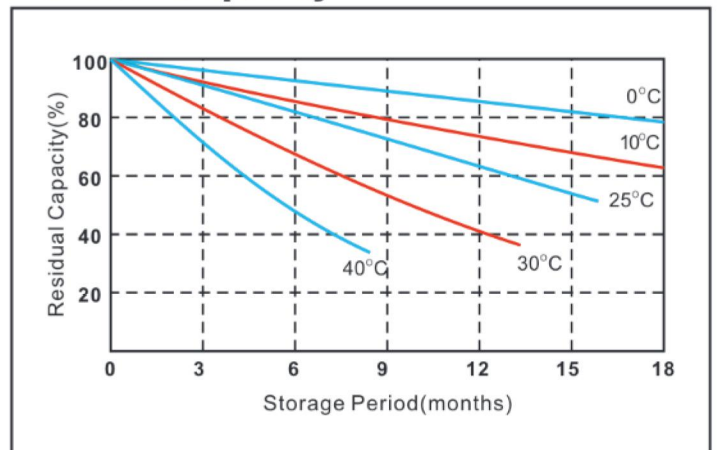
Unit:(mm) Terminal type:(F1)



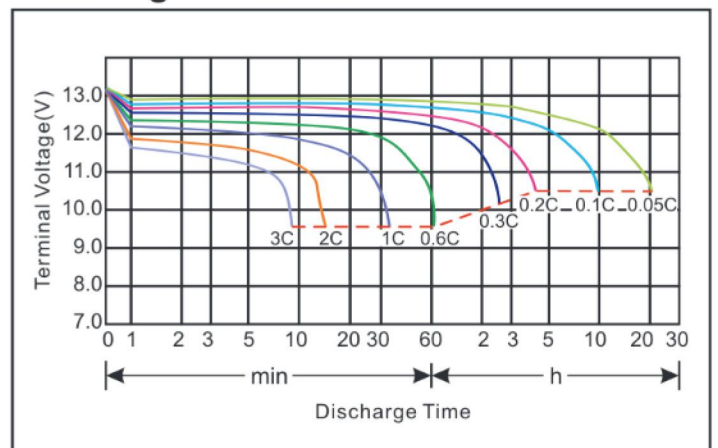
Parameter Chart:

Volts		12V	
Capacity(25°C)	(K20) 20 hours rate (115A)	2,3Ah	
Discharge Current Testing (25°C)	20 I ₂₀ rate (2,3Ah)	36min	
	60 I ₂₀ rate (6.6A,7min)	8min	
Internal Resistance	Full Charged Battery 25°C	52mΩ	
Capacity Affected By Temperature	50°C	104%	
	25°C	100%	
	0°C	83%	
	-20°C	65%	
Residual Capacity (25°C)	Capacity After 3 Months Storage	91%	
	Capacity After 6 Months Storage	82%	
	Capacity After 12 Months Storage	65%	
Charge (Constant Voltage)	Cycle (25°C)	Initial Charging Current Less Than 0.66A Voltage 14.5~14.9V	
	Float (25°C)	Charge Voltage 13.6~13.8V	

Residual Capacity



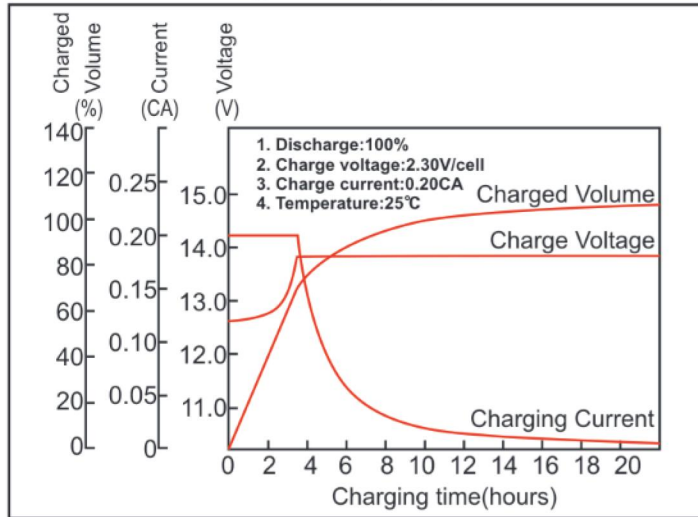
Discharge Current 25°C



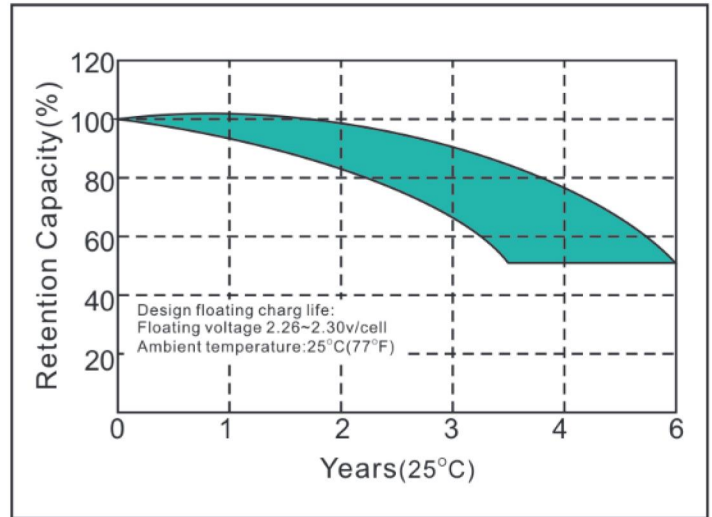
★ The above are average and data obtained from the first 3 charge/discharge cycles. These are not minimum values.

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Constant voltage charging characteristics



Float Life



Constant Current Discharge Characteristics Unit:A(25°C,77°F)

F.V/Time	5min	10min	15min	30min	60min	2h	3h	4h	5h	10h	20h
9.60V	8,79	5,57	4,35	2,45	1,51	0,82	0,57	0,47	0,40	0,22	0,117
9.90V	8,52	5,40	4,24	2,40	1,48	0,82	0,57	0,47	0,40	0,22	0,116
10.2V	8,17	5,18	4,09	2,33	1,45	0,81	0,56	0,47	0,40	0,22	0,116
10.5V	7,82	4,95	3,95	2,27	1,42	0,80	0,56	0,46	0,39	0,21	0,115
10.8V	7,38	4,68	3,74	2,19	1,37	0,78	0,54	0,45	0,38	0,21	0,113

Constant Power Discharge Characteristics Unit:W(25°C,77°F)

F.V/Time	5min	10min	15min	30min	60min	2h	3h	4h	5h	10h	20h
9.60V	98,1	62,8	49,6	28,1	17,4	9,64	6,77	5,62	4,79	2,61	1,40
9.90V	95,1	60,9	48,4	27,5	17,2	9,58	6,73	5,58	4,76	2,60	1,40
10.2V	91,2	58,4	46,6	26,7	16,7	9,50	6,69	5,54	4,73	2,59	1,39
10.5V	87,3	55,9	45,0	26,0	16,4	9,36	6,64	5,51	4,70	2,58	1,38
10.8V	82,4	52,7	42,6	25,1	15,9	9,12	6,44	5,34	4,56	2,52	1,35

Capacity Factors With Different Temperature

Battery Type		-20°C	-10°C	0°C	5°C	10°C	20°C	25°C	30°C	40°C	45°C
Battery	12V	50%	70%	83%	85%	90%	98%	100%	102%	104%	105%

★The above are average and data obtained from the first 3 charge/discharge cycles. These are not minimum values.



MSDS