

# VIGOR BATTERY

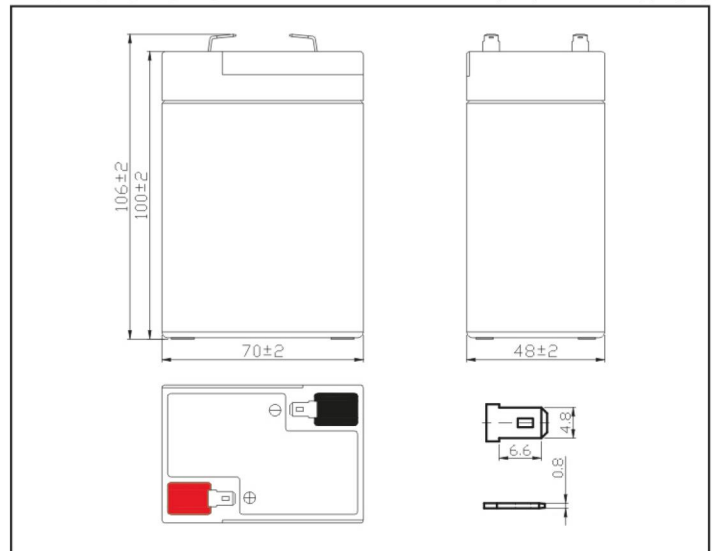
# VALVE REGULATED LEAD ACID BATTERY

**Model No : NP 4,5-6 6 V 4,5 AH**



## Plane Chart:

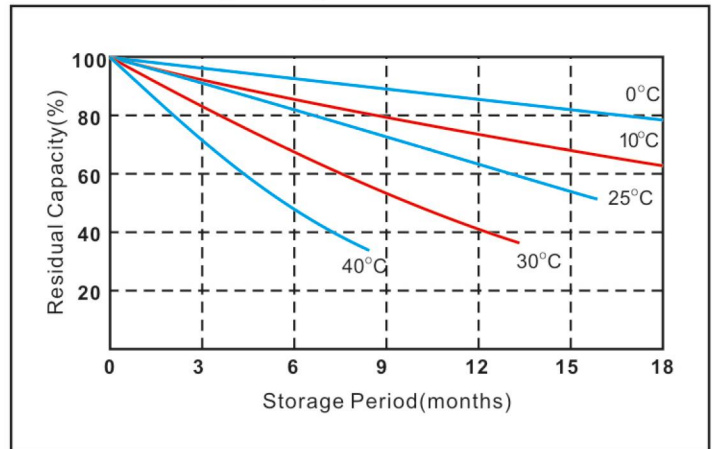
Unit:(mm) Terminal type:(F1)



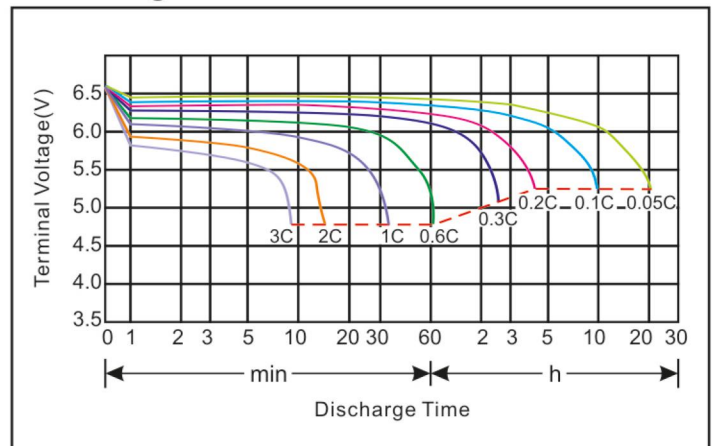
## Parameter Chart:

Volts		6V	
Capacity(25°C)	(K20) 20 hours rate (0.225A)	4.5Ah	
Discharge Current Testing (25°C)	20 I <sub>20</sub> rate (4.5A,27min)	33min	
	60 I <sub>20</sub> rate (13.5A,7min)	7min	
Internal Resistance	Full Charged Battery 25°C	16mΩ	
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 1.35A Voltage 7.25~7.45V	
	Float (25°C)	Charge Voltage 6.8~6.9V	

## Residual Capacity



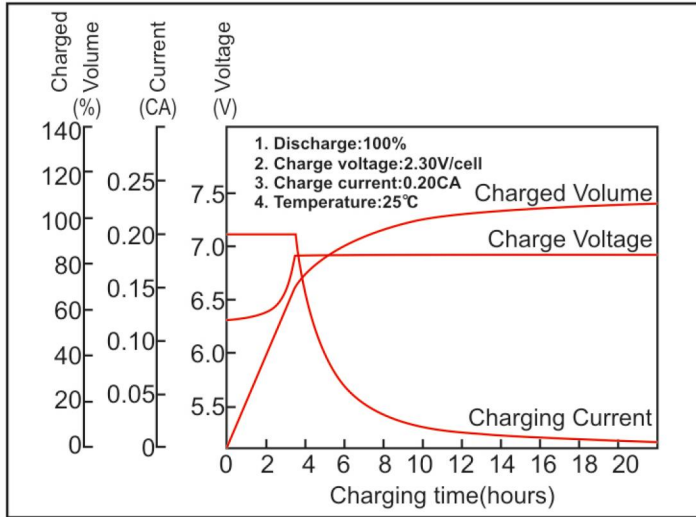
## Discharge Current 25°C



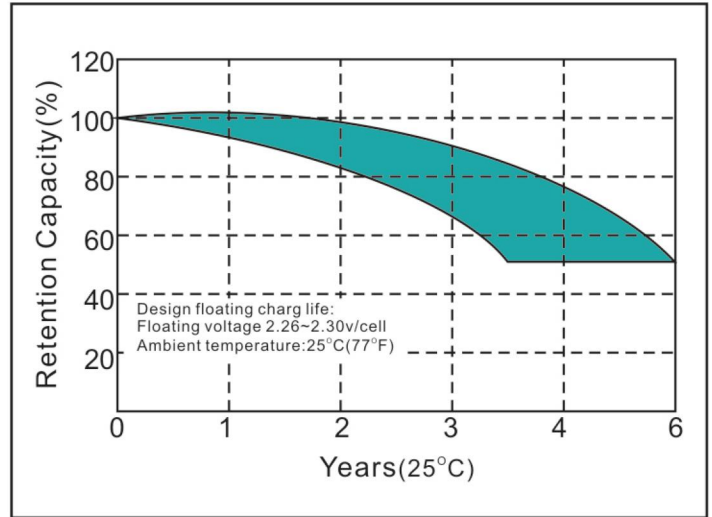
★The above are average and data obtained from the first 3 charge/discharge cycles. These are not minimum values.

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### Constant voltage charging characteristics



### Float Life



### Constant Current Discharge Characteristics (A, 25°C)

F.V/Time	5min	10min	15min	30min	60min	2h	3h	5h	8h	10h	20h
4.80V	15.36	9.79	7.89	4.77	2.66	1.47	1.05	0.72	0.51	0.43	0.23
5.10V	14.61	9.30	7.57	4.58	2.55	1.45	1.04	0.71	0.51	0.42	0.23
5.25V	14.15	9.01	7.38	4.47	2.49	1.44	1.03	0.71	0.51	0.41	0.23
5.40V	13.70	8.72	7.19	4.35	2.42	1.42	1.01	0.70	0.51	0.40	0.22

### Constant Current Discharge Characteristics (Watt, 25°C)

F.V/Time	5min	10min	15min	30min	60min	2h	3h	5h	8h	10h	20h
4.80V	84.46	54.53	44.28	27.02	15.21	8.51	6.19	4.26	3.08	2.59	1.38
5.10V	80.36	51.66	42.64	25.95	14.60	8.39	6.11	4.22	3.05	2.54	1.38
5.25V	77.90	50.02	41.57	25.30	14.23	8.30	6.03	4.16	3.04	2.48	1.35
5.40V	75.44	48.38	40.51	24.64	13.86	8.21	5.95	4.10	3.03	2.43	1.32

### 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	6V	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**