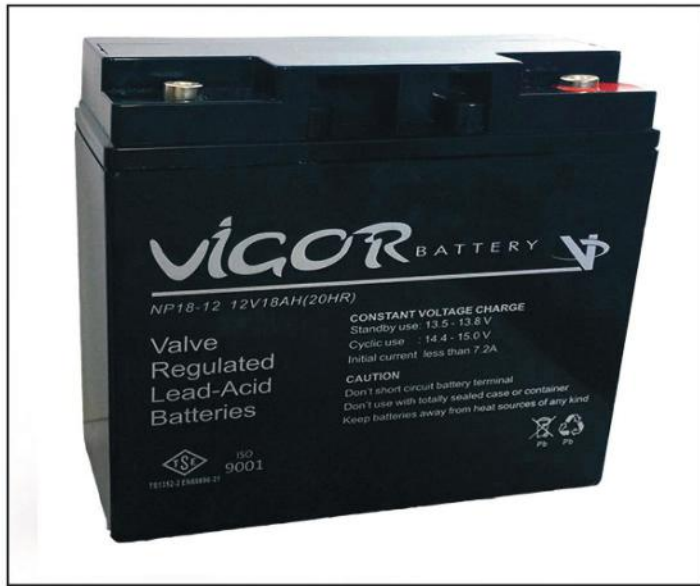


VIGOR BATTERY

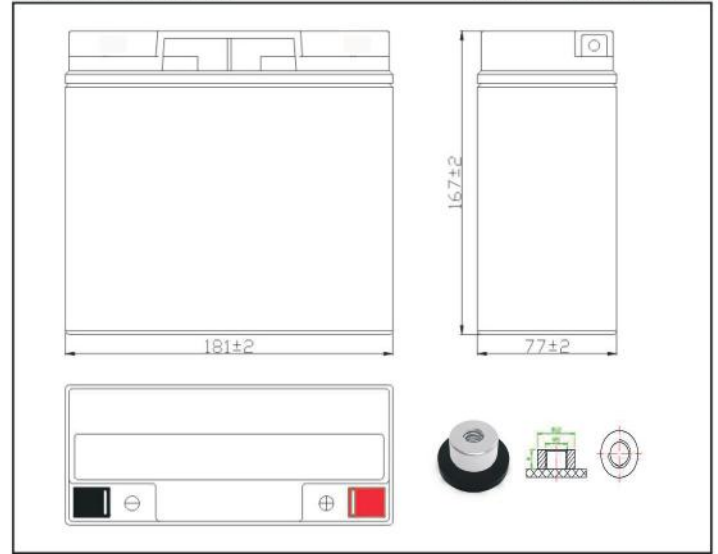
VALVE REGULATED LEAD ACID BATTERY

Model No : NP 18 -12 12 V 18 AH



Plane Chart:

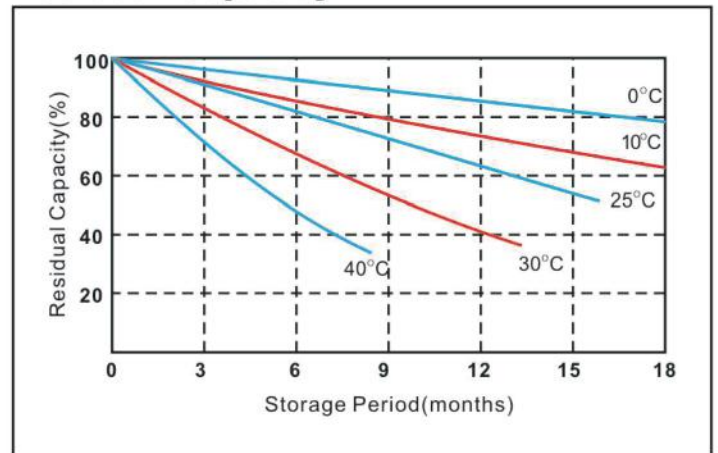
Unit:(mm) Terminal type: (T8)



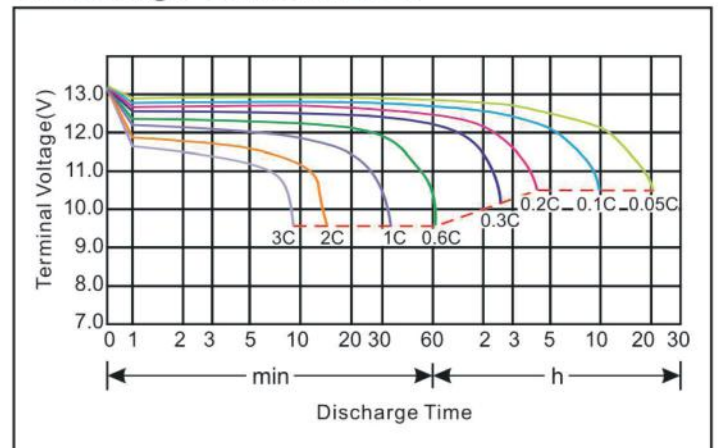
Parameter Chart:

Volts		12V	
Capacity(25°C)	(K20) 20 hours rate (0.9A)	18Ah	
Discharge Current Testing (25°C)	20 I ₂₀ rate (18A 27min)	35min	
	60 I ₂₀ rate (51A, 7min)	7min	
Internal Resistance	Full Charged Battery 25°C	12.5mΩ	
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 5.1A Voltage 14.5~14.9V	
	Float (25°C)	Charge Voltage 13.6~13.8V	
Weight (+-%2)		4.80 Kg.	

Residual Capacity



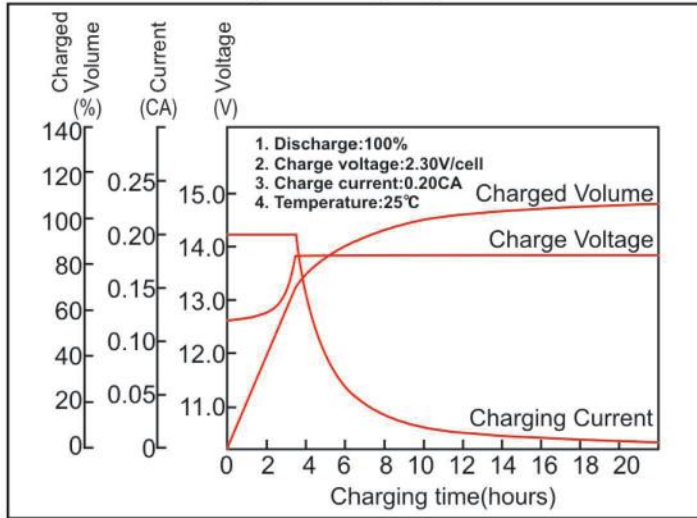
Discharge Current 25°C



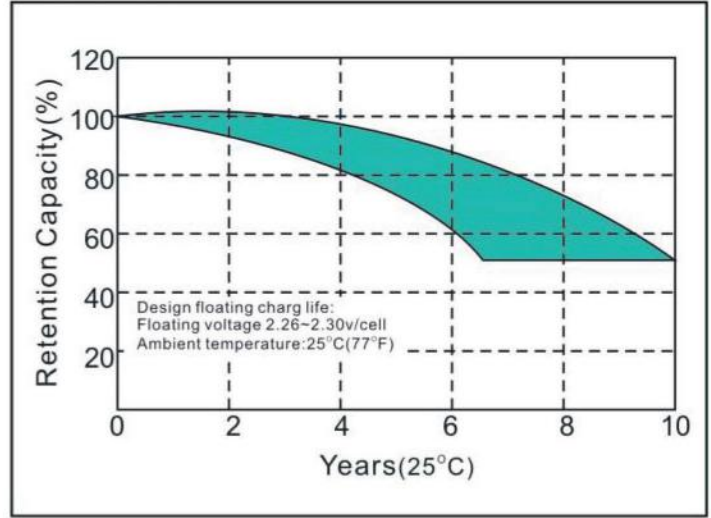
★ The above are average and data obtained from the first 3 charge/discharge cycles. These are not minimum values.

Model No : NP 18-12 12 V 18 AH

Constant voltage charging characteristics



Float Life



Constant Current Discharge Characteristics (A, 25°C)

F. V/Time	5min	10min	15min	30min	60min	2h	3h	4h	5h	10h	20h
9.60V	68,80	43,60	34,00	19,20	11,80	6,45	4,46	3,69	3,14	1,70	0,91
9.90V	66,70	42,30	33,20	18,80	11,60	6,41	4,44	3,67	3,12	1,70	0,91
10.2V	63,90	40,50	32,00	18,20	11,30	6,35	4,40	3,64	3,10	1,69	0,91
10.5V	61,20	38,80	30,90	17,80	11,10	6,26	4,37	3,62	3,08	1,68	0,90
10.8V	57,80	36,60	29,30	17,10	10,80	6,10	4,24	3,51	2,99	1,65	0,88

Constant Current Discharge Characteristics (Watt, 25°C)

F. V/Time	5min	10min	15min	30min	60min	2h	3h	4h	5h	10h	20h
9.60V	767,00	491,00	388,00	220,00	137,00	75,50	53,00	44,00	37,50	20,50	11,00
9.90V	744,00	477,00	379,00	215,00	134,00	75,00	52,70	43,70	37,30	20,40	10,90
10.2V	714,00	457,00	365,00	209,00	131,00	74,30	52,30	43,40	37,00	20,30	10,90
10.5V	683,00	437,00	352,00	204,00	128,00	73,20	52,00	43,10	36,80	20,20	10,80
10.8V	645,00	413,00	334,00	196,00	125,00	71,40	50,40	41,80	35,60	19,70	10,60

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