



# 12 VOLT RECHARGEABLE SERIES

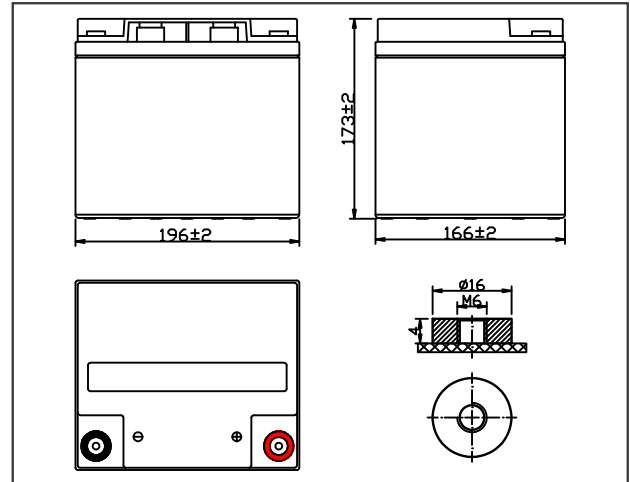
**MODEL: TP42-12**

**Product Code: VRLA-1242001**



### Plane Chart:

Unit:(mm) Terminal type:(T1)



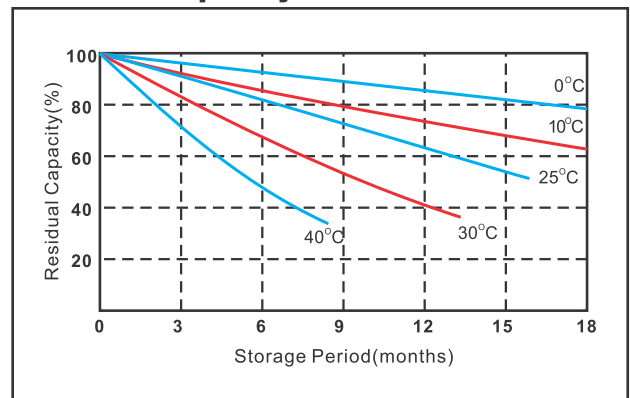
ISO 9001  
 ISO 14001  
 OHSAS18001



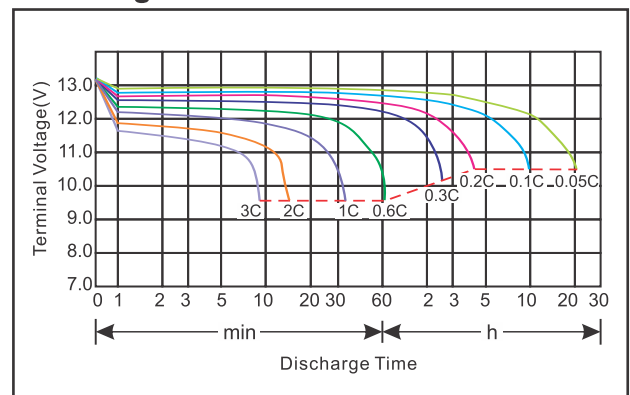
### Parameter Chart:

Volts		12V	
Capacity(25°C)	20 hours rate (2.0A)	40Ah	
Discharge Current Testing (25°C)	20 I <sub>20</sub> rate (40A,27min)	35min	
	60 I <sub>20</sub> rate (120A,7min)	8min	
Internal Resistance	Full Charged Battery 25°C	8mΩ	
Capacity Affected By Temperature	40°C	104%	
	25°C	100%	
	0°C	83%	
	-15°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 12A Voltage 14.5~14.9V	
	Float (25°C)	Charge Voltage 13.6~13.8V	
Weight (Approx)		12.6Kg	

### Residual Capacity



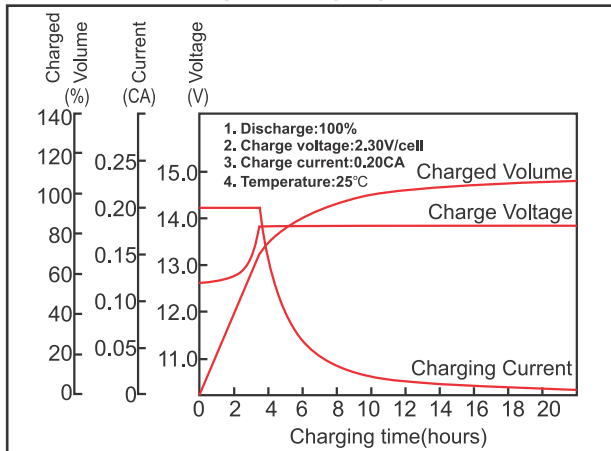
### Discharge Current 25°C



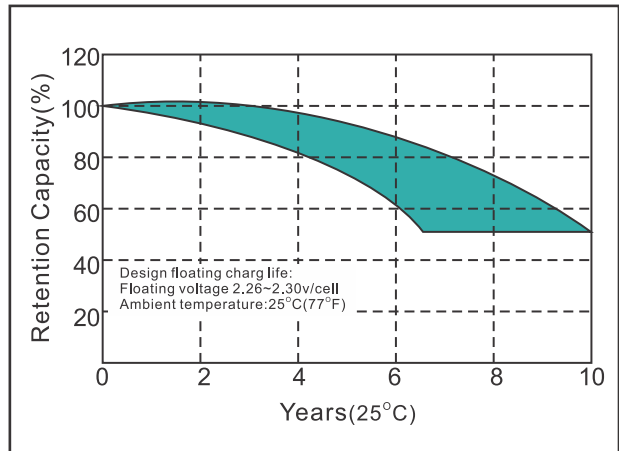
**MODEL: TP42-12**

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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
9.60V	120.2	80.0	62.8	40.0	23.9	13.9	9.9	7.0	4.6	4.0	2.1
10.2V	114.2	76.0	60.3	38.0	23.0	13.7	9.7	6.9	4.6	3.9	2.1
10.5V	110.7	73.6	58.8	37.0	22.4	13.6	9.6	6.8	4.6	3.8	2.0
10.8V	107.2	71.4	57.3	36.1	21.8	13.4	9.5	6.7	4.5	3.8	2.0

**Constant Power Discharge Characteristics (Watt, 25°C)**

F.V/Time	10min	10min	15min	30min	60min	2h	3h	5h	8h	10h	20h
9.60V	1259.5	863.7	689.4	443.9	273.5	160.5	116.2	82.3	55.0	46.2	24.3
10.2V	1196.4	820.6	662.3	426.9	262.5	158.2	114.2	81.0	54.5	45.7	24.1
10.5V	1160.3	796.1	645.8	415.8	256.0	157.0	113.2	80.2	54.2	45.5	24.0
10.8V	1124.2	771.5	629.3	404.8	249.5	155.2	112.2	79.4	53.7	45.3	23.9

**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.