



12 VOLT RECHARGEABLE SERIES

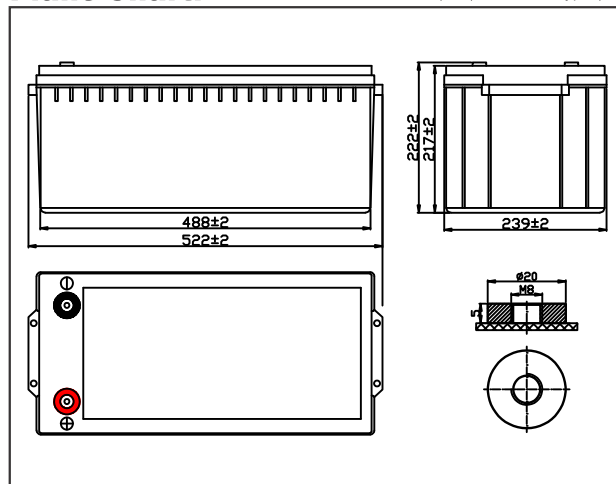
MODEL: TP200-12

Product Code: VRLA-12200001



Plane Chart:

Unit:(mm) Terminal type:(T3)



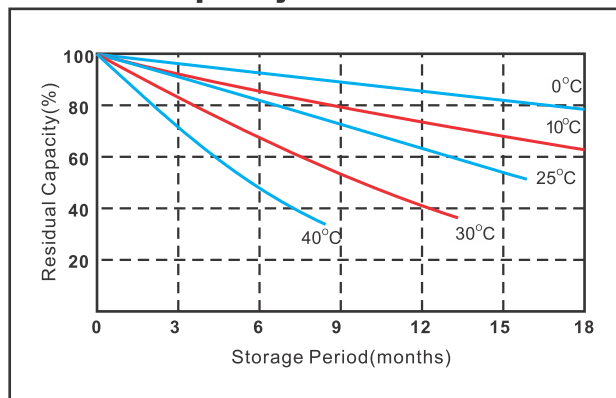
ISO 9001
 ISO 14001
 OHSAS18001



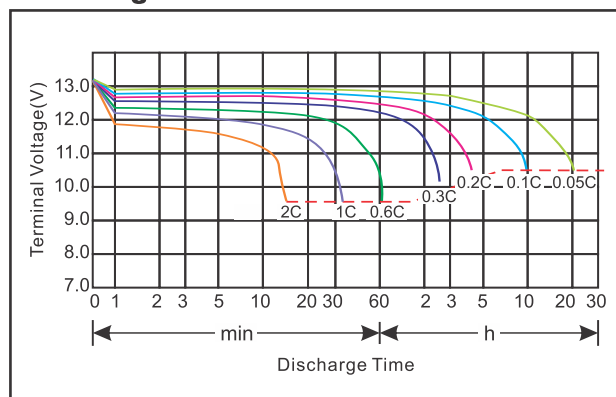
Parameter Chart:

Volts		12V	
Capacity(25°C)	10 hours rate (20A)	200Ah	
Discharge Current Testing (25°C)	1 hours rate (110A)	110Ah	
	3 hours rate (50A)	150Ah	
Internal Resistance	Full Charged Battery 25°C	3.2mΩ	
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 60A Voltage 14.5~14.9V	
	Float (25°C)	Charge Voltage 13.6~13.8V	
Weight (Approx)		60.2Kg	

Residual Capacity



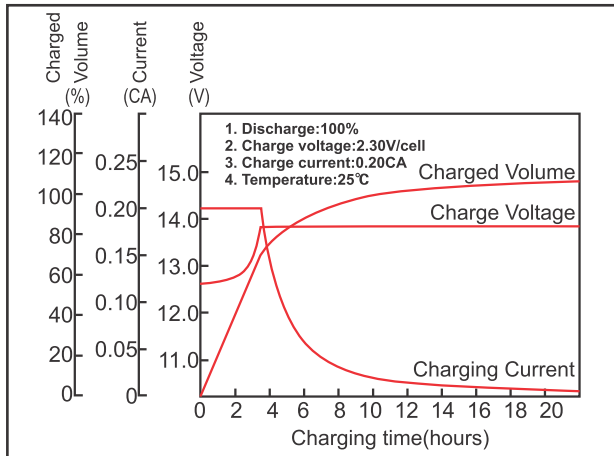
Discharge Current 25°C



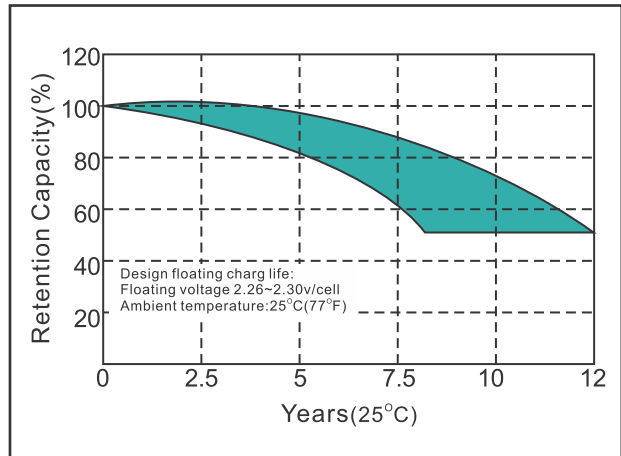
MODEL: TP200-12

Product Code : VRLA-12200001

Constant voltage charging characteristics



Float Life



Constant Current Discharge Characteristics(A,25°C)

F.V/Time	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	366.3	207.9	128.7	72.4	54.5	41.4	37.8	24.1	20.2	10.3
10.2V	351.5	200.0	123.8	71.3	53.0	40.9	36.6	23.9	20.1	10.2
10.5V	344.5	195.0	120.8	70.7	52.6	40.6	36.3	23.8	20.0	10.1
10.8V	333.6	190.1	117.8	69.8	51.9	39.4	35.9	23.5	20.0	10.1

Constant Power Discharge Characteristic(Watt,25°C)

F.V/Time	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	4022.4	2332.4	1467.2	837.5	632.6	487.1	439.6	285.1	239.6	122.8
10.2V	3861.0	2239.4	1410.8	824.7	622.7	481.1	432.6	283.1	238.5	121.8
10.5V	3782.8	2187.9	1376.1	817.7	617.8	477.2	428.7	282.2	237.6	120.8
10.8V	3668.0	2127.5	1338.5	807.8	610.8	463.3	424.7	278.2	236.8	120.2

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.