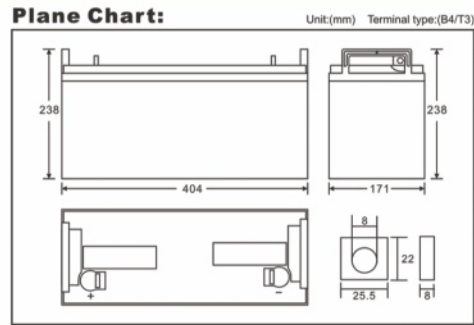




# VALVE REGULATED LEAD ACID BATTERY- MEDIUM AND LARGE CAPACITY SERIES

MODEL: TP120-12

Product Code: VRLA-12120001



### Characteristic:

1. 100% testing before out of factory, stable and reliable quality is guaranteed.
2. Professional alloy formula and advanced manufacturing techniques.
3. Completely sealed and maintainance free, low self-discharge.
4. Good charge-discharge acceptability.
5. Cyclic application: deep cycle charge-discharge for more than 260 times.
6. Floating application: for 3-5 years.

### Application:

- Anti-theft system
- Radio transceiver
- Power system
- Railroad engine and railway communication
- Emergency lighting and lamps
- Electric tools
- Electronic instruments and other backup power
- Medical facilities
- UPS for banking system
- Computer backup power
- Marine system
- UPS for fire fighting system
- Toys

### Parts:

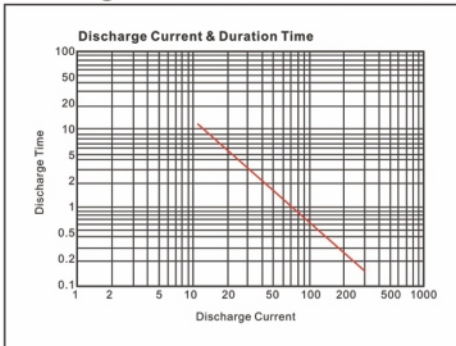
Executed Standard: GB/T 19638.2-2005

Cover	Container Bottom	Terminal	Positive Plate	Negative Plate	Separator	Electrolyte	Safety Valve	Seal Glue
ABS	ABS	Copper	PbO <sub>2</sub>	Pb	AGM	dilute sulphuric acid	Rubber	Epoxy Resin

### Packing

Date	Battery Packing	Inner Packing	Outer Packing
① Printing	① Polybag	Paper Box	Carton Packing
② Branded	② Shrink		
Carton Sealing		Accessories	
① Packing Strap		Bolts&nuts	Mini Charger
② Shrink		With	Optional

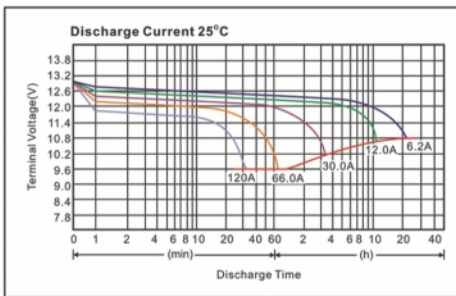
### Discharge Curve



### Parameter Chart:

Volts		12V	
Capacity(25°C)	10 hours rate (12A)	120Ah	
	3 hours rate (30A)	95Ah	
	1 hours rate (66A)	72Ah	
Internal Resistance	Full Charged Battery 25°C	3.4mΩ	
Capacity Affected By Temperature (20 hours rate)	40°C	102%	
	25°C	100%	
	0°C	85%	
	-15°C	62%	
Residual Capacity (25°C)	Capacity After 3 Months Storage	91%	
	Capacity After 6 Months Storage	82%	
	Capacity After 12 Months Storage	64%	
Charge (Constant Voltage)	Cycle (25°C)	Initial Charging Current Less Than 36A Voltage 14.5-14.9V	
Float Service Life(Above 5 Years)		Float Charge Voltage 13.6-13.8/12V (25°C)	
Weight (Approx)		37.2Kg	

\*The above are average and date obtained from the first 3 charge/discharge cycles. These are not minimum values.



Constant Current Discharge (Amperes) at 25°C (77°F)												
F.V/Time	5min	10min	15min	30min	1Hr	2Hr	3Hr	4Hr	5Hr	6Hr	10Hr	20Hr
1.80V/cell	19.320	14.490	10.500	7.070	4.130	2.310	1.750	1.400	1.232	1.008	0.658	0.343
1.75V/cell	20.020	14.770	10.710	7.210	4.190	2.380	1.820	1.470	1.260	1.022	0.672	0.350
1.70V/cell	21.840	15.680	11.340	7.490	4.270	2.450	1.869	1.491	1.281	1.043	0.685	0.356
1.65V/cell	24.010	17.010	12.320	7.910	4.270	2.460	1.890	1.509	1.295	1.050	0.693	0.357
1.60V/cell	26.040	17.850	12.950	8.260	4.340	2.520	1.904	1.519	1.309	1.071	0.700	0.364

Constant Power Discharge (Watts/cell) at 25°C (77°F)												
F.V/Time	5min	10min	15min	30min	1Hr	2Hr	3Hr	4Hr	5Hr	6Hr	10Hr	20Hr
1.80V/cell	253.090	186.310	149.310	88.790	50.950	27.600	20.399	16.860	14.070	11.820	7.858	4.116
1.75V/cell	292.910	201.810	156.200	92.190	52.470	26.140	20.811	17.160	14.280	12.000	7.980	4.200
1.70V/cell	311.220	209.120	160.990	94.290	53.420	28.620	21.000	17.460	14.360	12.240	8.022	4.221
1.65V/cell	325.210	214.120	164.680	95.590	54.060	28.920	21.151	17.640	14.410	12.360	8.039	4.229
1.60V/cell	336.000	218.400	168.000	96.600	54.600	29.220	21.269	17.820	14.448	12.480	8.039	4.229