



LIGHTWAVE



Tall Tubular Battery

Model : **LW-TTB-200AH-C10**

Model	LW-TTB-200AH-C10
Battery Type	Deep cycle Flooded Tubular
Nominal Voltage (Volts)	12v
Capacity	200AH
Ratings	C10
Dimensions (mm)	502x190x410 (LxBxH)
Weight (Kgs)	66.5 Kgs (± 1%)
Positive Plate Type	Tubular (PbSn ⁺ Tech)
Tubular Bag	High Porosity Woven
Separator	High Charge PE
Electrolyte Type	Sulphuric Acid with Performance additives

♦ High performance tubular plates with ultra-frequency vibration filling process to ensure uniform paste density throughout the plate for longer life & consistent backup.

♦ PbSn+tech primary lead alloy composition & Advanced high pressure die casting machines to ensure defect free casting with high resistance to corrosion.

♦ Especially formulated expanders for active material to increase performance and cyclic life.

♦ Electrolyte with high purity additives to increase charge efficiency and self-life.

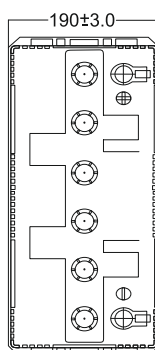
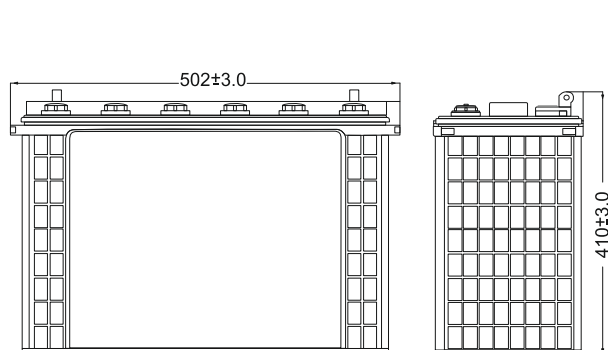
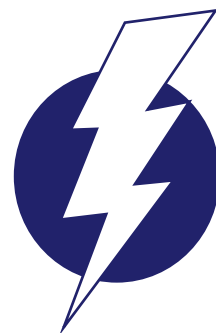
♦ Excellent performance on deep cyclic application and

faster recovery from deep discharge.

♦ Ceramic level indicators with permitted porosity to control spilling & suppress water loss to reduce water topping frequency.

♦ High strength PP (polypropylene) with extra dense injection moulding for battery container.

♦ Confirms IS 13369:1992 & IEC 60896-11, IEC 61427-1 Standards



COTECNA



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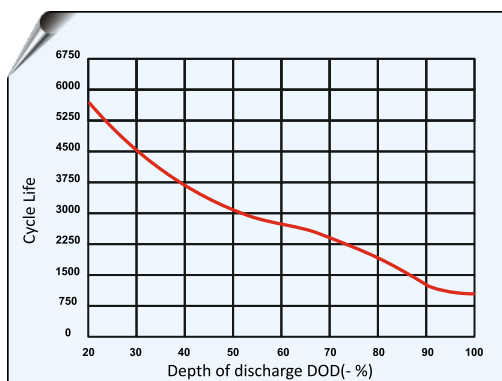


Fig: 1.1 Typical DOD vs Life Cycle

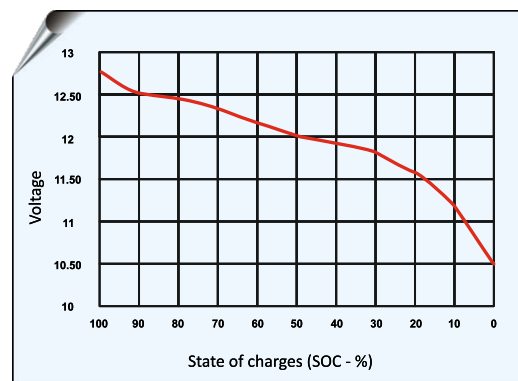


Fig: 1.2 State of charge characteristics

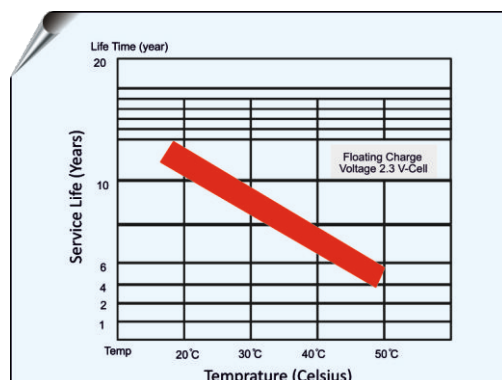


Fig: 1.3 Service (Float) Life & Temperature

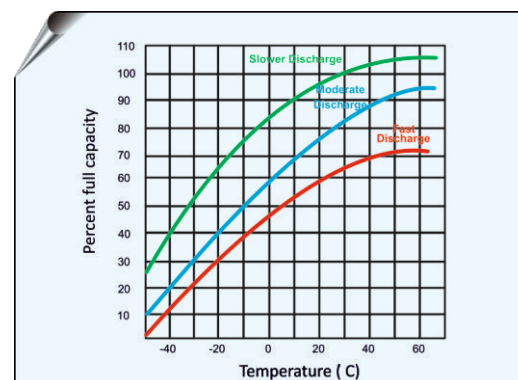


Fig: 1.4 Expected capacity vs Temperature

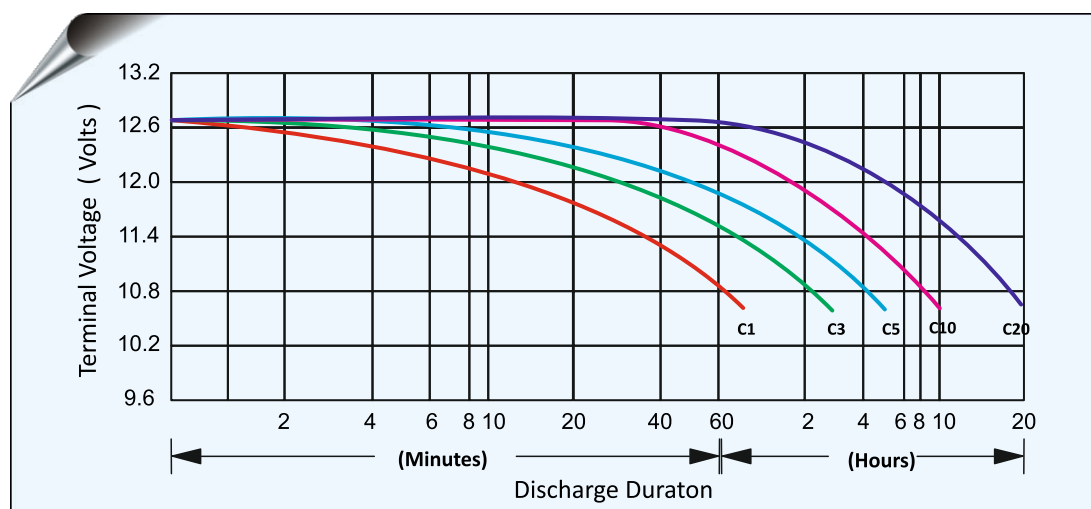


Fig: 1.5 Typical discharge curve at constant current discharge



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POWER DISCHARGE PERFORMANCE		
MAXIMUM BACKUP DURATION (HH:MM)		
Load	400W	200W
Time	04:45	09:45
**All test data based on stabilized battery capacity on new battery, under controlled laboratory test conditions with mean sum of 5 tests on bulb load.		

CHARGE CHARACTERISTICS (27°C)			
System	12V	24V	48V
Charging cut off / Bulk Voltage	14.5V - 14.6V	29.0V - 29.2V	58.0V - 58.4V
Float Voltage	13.5V - 13.6V	27.0V - 27.2V	54.0V - 54.4V
Under Voltage Warning / Low Voltage alarm	10.8V - 11.0V	21.6V - 22.0V	43.2V - 44.0V
Battery Low Breaking / Cut off Voltage	10.5V - 10.7V	21.0V - 21.4V	42.0V - 42.8V

**Battery to be recharged in CV mode only

CHARGING TEMPERATURE COMPENSATION	
ADD	SUBTRACT
0.005 volt per cell for every 1°C below 25°C	0.005 Volt per cell for every 1°C above 25°C
0.0028 Volt per cell for every 1 F below 77 F	0.0028 Volt per cell for every 1 F above 77 F

MEASURE OF STATE OF CHARGE IN OPEN CIRCUIT VOLTAGE (27°C)

State of charge	0%	25%	50%	75%	100%
Specific Gravity	1.120	1.155	1.190	1.225	1.260
Voltage	11.8 V	12 V	12.1 V	12.4 V	12.7 V

M30 Opti-pressure ceramic Fluid Level Indicator



M22 CeraPE Vent Plug



M30 Dummy Plug



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