



LPM SERIES-Marine Use

LPM 12-240(12V240AH)

Specification

Nominal Voltage	12V	
Nominal Capacity(20HR)	240.0AH	
Dimension	Length	517± 3mm (20.55 inches)
	Width	272± 2mm (9.45 inches)
	Container Height	218± 2mm (8.58 inches)
	Total Height (with Terminal)	240± 2mm (9.45 inches)
	Approx Weight	Approx 68.9 Kg (151.9 lbs)
Terminal	\	
Reserve Capacity	505min	
Rated Capacity	240.0 AH/12.0A	(20hr, 1.80V/cell, 25°C/77°F)
	223.0 AH/22.3A	(10hr, 1.80V/cell, 25°C/77°F)
	202.0 AH/40.4A	(5hr, 1.75V/cell, 25°C/77°F)
	181.2 AH/60.4A	(3hr, 1.75V/cell, 25°C/77°F)
	157.4 AH/157.4A	(1hr, 1.60V/cell, 25°C/77°F)
Cold Cranking Ampere	1000A	
Max. Discharge Current	2400A (5s)	
Internal Resistance	Approx 2.5mΩ	
Operating Temp. Range	Discharge	: -15~50°C (5~122°F)
	Charge	: 0~40°C (32~104°F)
	Storage	: -15~40°C (5~104°F)
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Cycle Use	Initial Charging Current less than 72.0A. Voltage	14.4V~15.0V at 25°C(77°F)Temp. Coefficient -30mV/°C
	Standby Use	No limit on Initial Charging Current Voltage 13.5V~13.8V at 25°C(77°F)Temp. Coefficient -20mV/°C
Capacity affected by Temperature	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	Leoch LPM series batteries may be stored for up to 6 months at 25°C(77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	



Applications

- ◆ Boat
- ◆ Yacht
- ◆ Mobile home
- ◆ Truck
- ◆ Lorry

Constant Current Discharge (Amperes) at 25 °C (77°F)

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	365.9	313.8	277.5	220.8	168.3	136.3	79.1	57.4	45.9	38.5	33.2	26.3	21.8	11.8
1.80V/cell	423.1	348.3	299.3	235.3	175.7	141.1	81.0	59.0	47.0	39.5	34.1	27.0	22.3	12.0
1.75V/cell	460.8	373.6	316.3	243.9	182.4	145.7	82.9	60.4	48.3	40.4	34.8	27.5	22.7	12.2
1.70V/cell	496.5	393.6	330.6	253.0	187.2	149.5	85.3	61.5	49.1	41.1	35.4	27.9	23.1	12.4
1.65V/cell	523.7	415.4	347.5	262.1	192.6	153.4	87.2	62.8	50.0	41.8	36.0	28.3	23.4	12.5
1.60V/cell	556.4	436.2	361.2	271.2	199.0	157.4	89.0	64.2	50.9	42.5	36.5	28.7	23.7	12.7

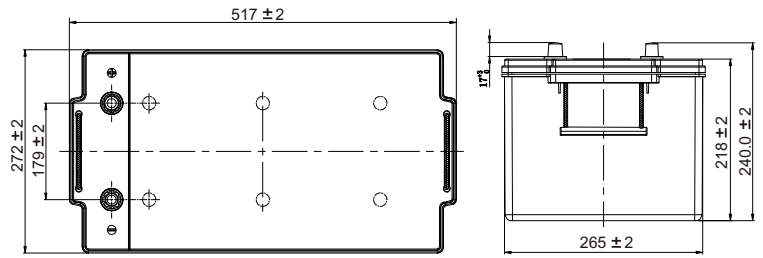
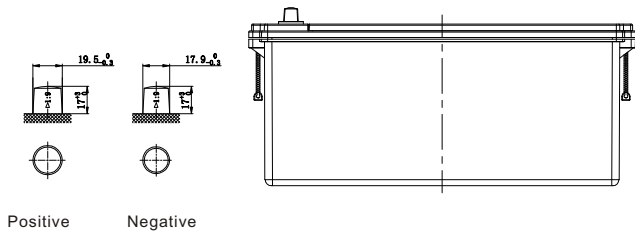
Constant Power Discharge (Watts) at 25 °C (77°F)

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	702.0	608.1	541.6	433.5	332.3	270.4	157.5	114.6	92.0	77.4	67.0	53.3	44.1	23.9
1.80V/cell	804.4	669.5	580.4	459.2	344.9	278.6	160.7	117.4	94.0	79.1	68.4	54.3	45.0	24.3
1.75V/cell	869.7	713.5	609.8	474.0	356.8	286.8	164.0	119.8	96.2	80.7	69.7	55.1	45.6	24.6
1.70V/cell	928.8	746.6	634.0	489.8	365.2	293.5	168.3	121.7	97.5	81.9	70.5	55.9	46.3	24.9
1.65V/cell	973.8	783.8	663.5	505.8	374.9	300.3	171.6	124.0	99.1	83.0	71.6	56.5	46.8	25.1
1.60V/cell	1025.6	817.5	686.2	521.2	385.7	307.2	174.6	126.3	100.7	84.2	72.5	57.1	47.3	25.4

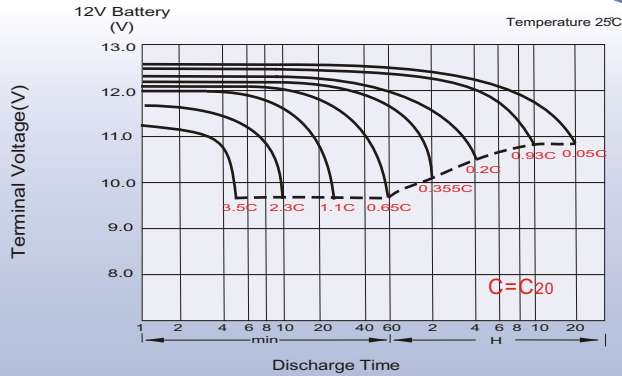
Values are subject to variation of +/- 5% in normal manufacturing processes. Technical specifications and the product line above could be changed without prior notice

Dimensions

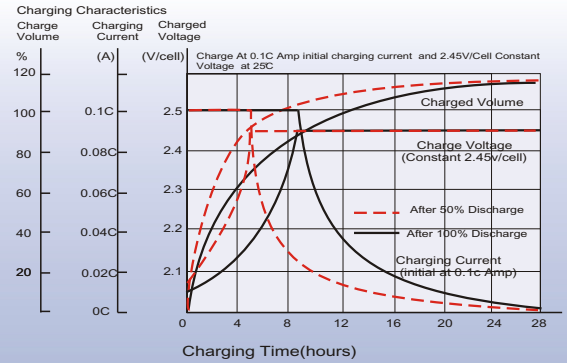
Terminal



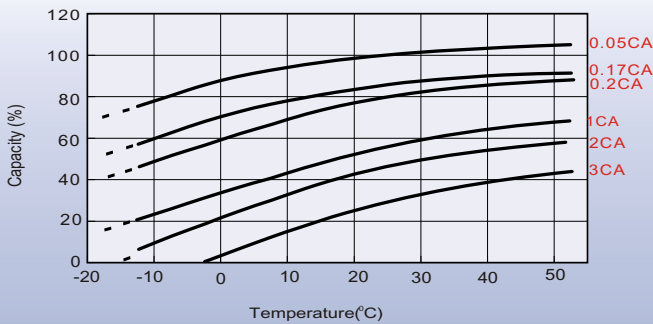
Discharge Characteristics



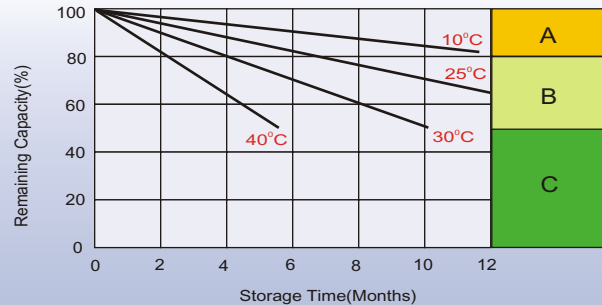
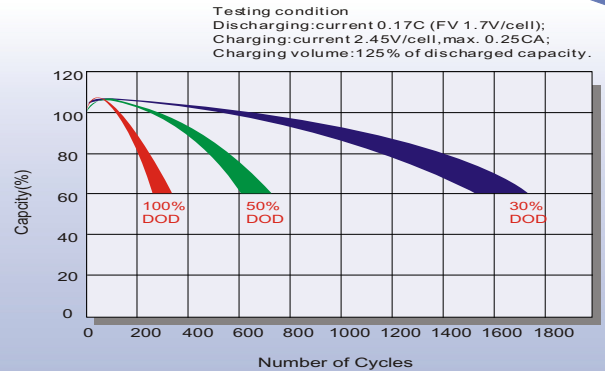
Charging Characteristics (cycle use)



Temperature Effects in Relation to Battery Capacity



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics

- A** No supplementary charge required
(Carry out supplementary charge before use if 100% capacity is required.)
- B** Supplementary charge required before use. Optional charging way as below:
 1. Charged for above 3 days at limited current 0.25CA and constant voltage 2.25V/cell.
 2. Charged for above 20 hours at limited current 0.25CA and constant voltage 2.45V/cell.
 3. Charged for 8-10 hours at limited current 0.05CA.
- C** Supplementary charge may often fail to recover the capacity.
The battery should never be left standing till this is reached.