

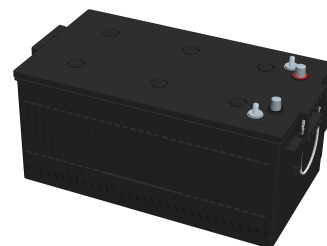


LPM SERIES-Marine Use

LPM 12-285(12V285AH)

Specification

Nominal Voltage	12V	
Nominal Capacity(20HR)	285.0AH	
Dimension	Length	527 ± 3mm (20.75 inches)
	Width	280 ± 2mm (11.02 inches)
	Container Height	230 ± 2mm (9.06 inches)
	Total Height (with Terminal)	252 ± 2mm (9.92 inches)
	Approx Weight	Approx 77.9 Kg (171.8 lbs)
Terminal	DT-3/8	
Reserve Capacity	640min	
Rated Capacity	285.0 AH/14.3A	(20hr, 1.80V/cell, 25°C/77°F)
	260.0 AH/26.0A	(10hr, 1.80V/cell, 25°C/77°F)
	225.0AH/45.0A	(5hr, 1.75V/cell, 25°C/77°F)
	213.0 AH/71.0A	(3hr, 1.75V/cell, 25°C/77°F)
	155.0 AH/155.0A	(1hr, 1.60V/cell, 25°C/77°F)
Cold Cranking Ampere	1050A	
Max. Discharge Current	2280A (5s)	
Internal Resistance	Approx 2.8mΩ	
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 57.0A. 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	434.5	372.6	329.5	262.2	199.9	134.2	93.9	67.5	54.5	42.9	39.4	31.2	25.4	14.0
1.80V/cell	502.4	413.6	355.4	279.4	208.6	139.0	96.2	69.4	55.8	44.0	40.5	32.1	26.0	14.3
1.75V/cell	547.2	443.7	375.6	289.6	216.6	143.5	98.4	71.0	57.4	45.0	41.3	32.7	26.4	14.5
1.70V/cell	589.6	467.4	392.6	300.4	222.3	147.2	101.3	72.3	58.3	45.8	42.0	33.1	26.9	14.7
1.65V/cell	621.9	493.3	412.7	311.2	228.7	151.1	103.6	73.8	59.4	46.5	42.8	33.6	27.3	14.8
1.60V/cell	660.7	518.0	428.9	322.1	236.3	155.0	105.7	75.5	60.4	47.3	43.3	34.1	27.6	15.1

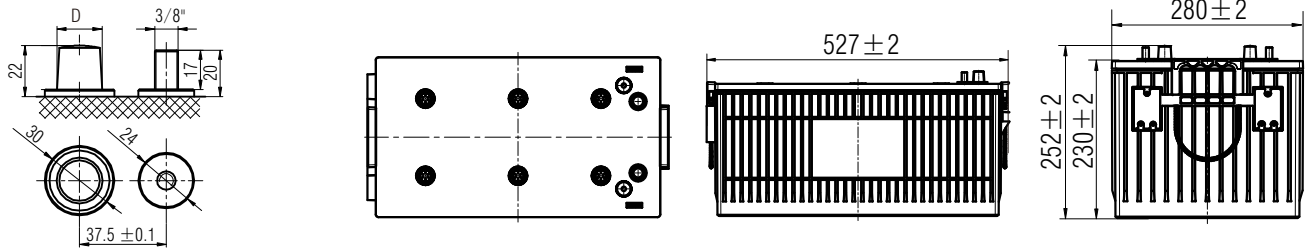
Constant Power Discharge (Watts) at 25 °C (77°F)

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	833.6	722.1	643.2	514.8	394.6	266.3	187.0	134.8	109.3	86.2	79.6	63.3	51.4	28.4
1.80V/cell	955.2	795.0	689.2	545.3	409.6	274.4	190.8	138	111.6	88.1	81.2	64.5	52.4	28.9
1.75V/cell	1032.8	847.3	724.1	562.9	423.7	282.4	194.8	140.9	114.2	89.8	82.8	65.4	53.1	29.2
1.70V/cell	1103.0	886.6	752.9	581.6	433.7	289	199.9	143.1	115.8	91.2	83.7	66.4	53.9	29.6
1.65V/cell	1156.4	930.8	787.9	600.6	445.2	295.7	203.8	145.8	117.7	92.4	85.0	67.1	54.5	29.8
1.60V/cell	1217.9	970.8	814.9	618.9	458.0	302.5	207.3	148.5	119.6	93.7	86.1	67.8	55.1	30.2

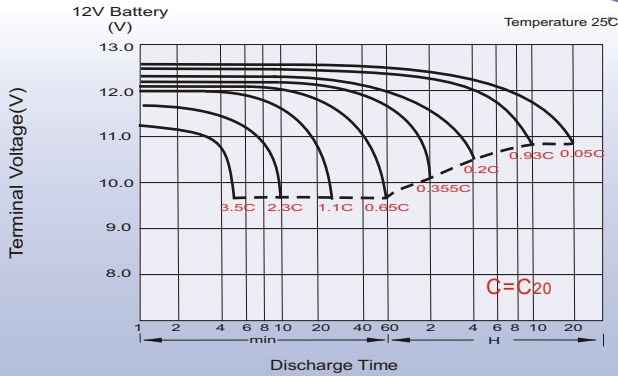
Values are subject to variation of +/- 5% in normal manufacturing processes. Technical specifications and the product line above could be changed without prior notice

Dimensions

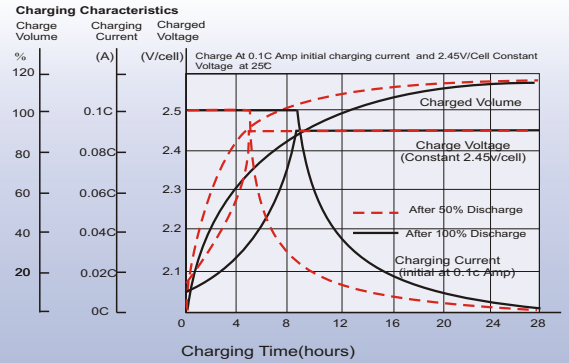
DT-3/8 Terminal



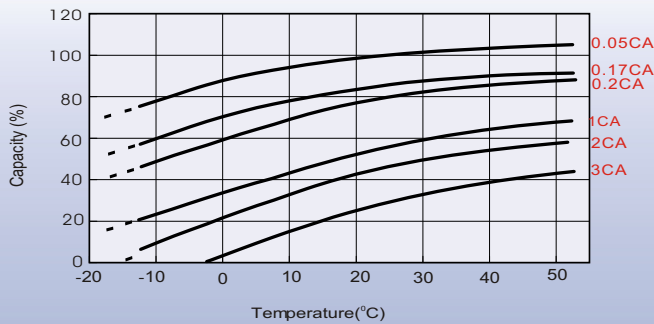
Discharge Characteristics



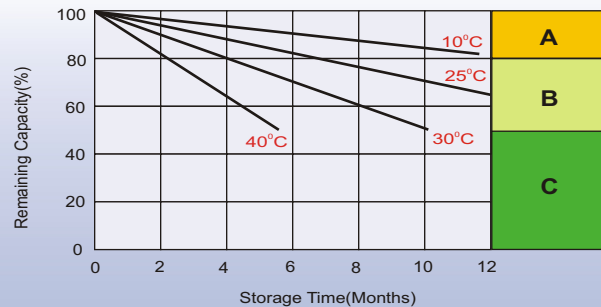
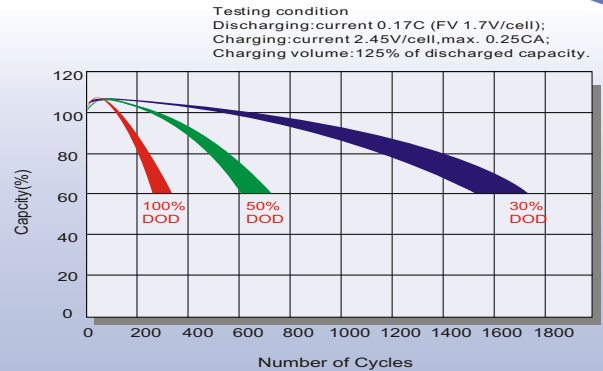
Charging Characteristics (cycle use)



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 volatge 2.25V/cell.
 2. Charged for above 20hours at limited current 0.25CA and constant volatge 2.45V/cell.
 3. Charged for 8-10hours 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.