

LPF SERIES-Front Terminal

LPF12-180 (12V180AH)

Specification

Nominal Voltage	12V	
Nominal Capacity(10HR)	180.0AH	
Dimension	Length	560±2mm (22.05 inches)
	Width	126±2mm (4.96 inches)
	Container Height	280±2mm (11.02 inches)
	Total Height (with Terminal)	280±2mm (11.02 inches)
Approx Weight	Approx 54.0 Kg (119.1 lbs)	
Terminal	T13	
Container Material	ABS	
Rated Capacity	190.6 AH/9.53A	(20hr, 1.80V/cell, 25°C/77°F)
	180.0 AH/18.0A	(10hr, 1.80V/cell, 25°C/77°F)
	173.4 AH/21.68A	(8hr, 1.80V/cell, 25°C/77°F)
	163.8 AH/32.76A	(5hr, 1.75V/cell, 25°C/77°F)
	120.0 AH/120.0A	(1hr, 1.67V/cell, 25°C/77°F)
Max. Discharge Current	1360A (5s)	
Internal Resistance	Approx 2.9mΩ	
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 54.0A. 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 LPF 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

- ◆ For standard 19 inches or 23 inches power cabinets
- ◆ Network connection equipment of communication system
- ◆ Power system of special network or local area network
- ◆ UPS, standby power supply
- ◆ Power station systems
- ◆ Railway and marine systems



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	301.6	251.4	215.7	169.2	131.2	106.7	63.6	45.8	36.8	30.4	26.5	20.63	17.21	9.12
1.80V/cell	341.9	280.2	238.8	185.2	141.2	113.9	67.1	48.7	38.7	32.0	27.8	21.68	18.00	9.53
1.75V/cell	375.2	303.2	254.8	194.6	146.6	117.9	68.4	49.5	39.7	32.8	28.3	21.94	18.21	9.68
1.70V/cell	401.4	319.4	265.1	200.3	149.9	119.5	69.3	50.0	39.9	32.9	28.6	22.25	18.38	9.75
1.67V/cell	415.3	327.3	270.6	202.8	150.5	120.0	69.6	50.3	40.2	33.3	29.0	22.54	18.55	9.80
1.60V/cell	436.6	339.9	282.7	207.9	154.5	123.1	70.8	51.3	41.1	34.2	29.5	23.06	18.90	9.85

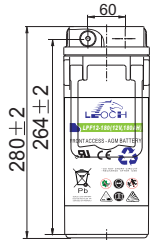
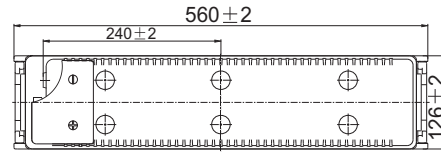
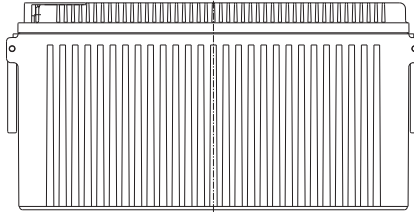
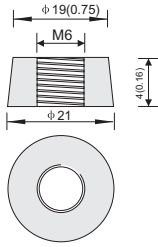
Constant Power Discharge (Watts) at 25 °C (77°F)

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	563.2	474.2	411.0	325.9	254.8	207.9	124.8	90.2	72.7	60.3	52.6	41.1	34.4	18.2
1.80V/cell	631.0	521.4	448.3	351.2	272.0	220.7	130.8	95.4	76.0	63.1	55.1	43.1	35.9	19.0
1.75V/cell	681.5	557.4	473.8	366.1	279.8	227.5	132.8	96.6	77.7	64.4	55.7	43.5	36.3	19.3
1.70V/cell	712.7	579.0	489.3	374.7	285.2	229.8	134.4	97.4	78.1	64.5	56.3	44.1	36.6	19.4
1.67V/cell	734.6	591.0	497.4	378.7	285.3	230.3	134.6	97.7	78.6	65.2	56.8	44.6	36.9	19.5
1.60V/cell	750.9	601.5	512.3	383.2	289.6	233.9	135.7	99.1	79.8	66.6	57.7	45.5	37.5	19.6

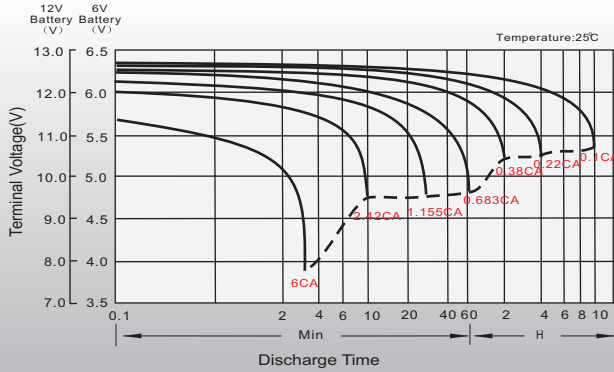
Dimensions

T13 Terminal

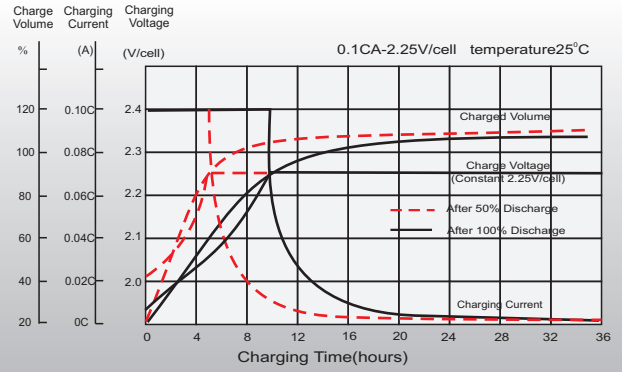
Unit: mm [inches]



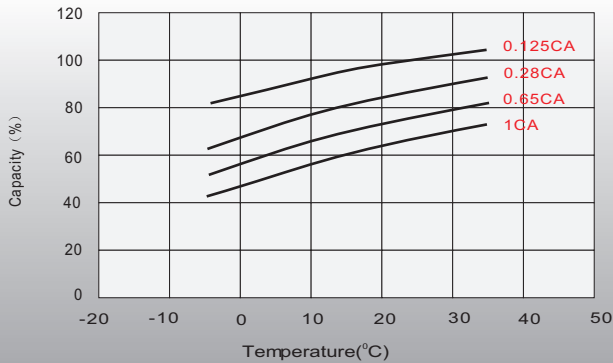
Discharge Characteristics



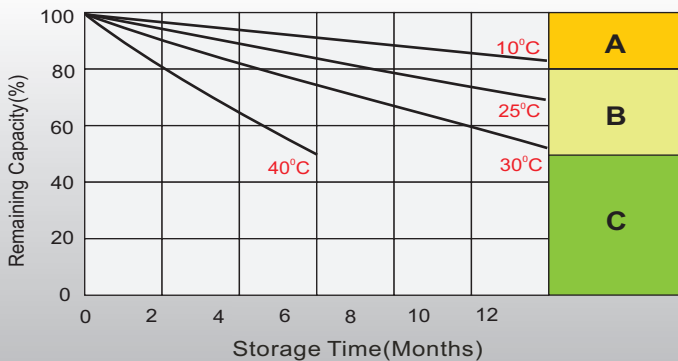
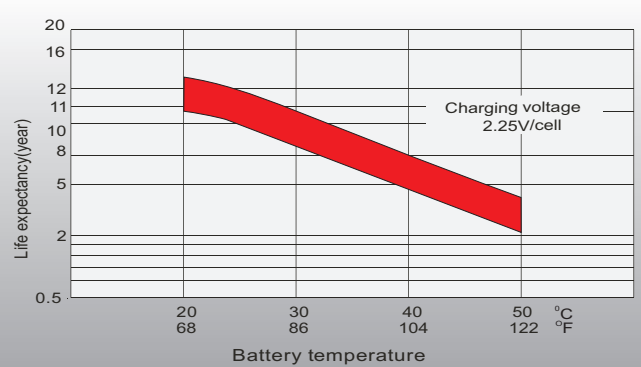
Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life



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.

Sales Office

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