

# LP SERIES-General Purpose

## LP12-60 (12V60AH)

### Specification

Nominal Voltage	12V	
Nominal Capacity(10HR)	60.0AH	
Dimension	Length	259±2mm (10.20 inches)
	Width	168±2mm (6.61 inches)
	Container Height	208±2mm (8.19 inches)
	Total Height (with Terminal)	230±2mm (9.06 inches)
	Approx Weight	Approx 18.5 kg (40.8lbs)
Terminal	T6 / T9 / T14	
Container Material	ABS	
Rated Capacity	62.4 AH/3.12A	(20hr, 1.80V/cell, 25°C/77°F)
	60.0 AH/6.00A	(10hr, 1.80V/cell, 25°C/77°F)
	51.5 AH/10.3A	(5hr, 1.75V/cell, 25°C/77°F)
	46.8 AH/15.6A	(3hr, 1.75V/cell, 25°C/77°F)
	36.6 AH/36.6A	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	720A (5s)	
Internal Resistance	Approx 7.4mΩ	
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 18.0A. 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 LP 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

- ◆ All purpose
- ◆ Uninterruptable Power Supply (UPS)
- ◆ Electric Power System (EPS)
- ◆ Emergency backup power supply
- ◆ Emergency light
- ◆ Railway signal
- ◆ Aircraft signal
- ◆ Alarm and security system
- ◆ Electronic apparatus and equipment
- ◆ Communication power supply
- ◆ DC power supply
- ◆ Auto control system



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

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	102.7	80.7	68.7	57.4	45.6	34.5	28.3	18.0	14.2	11.6	9.38	8.17	6.63	5.66	3.09
1.80V/cell	137.8	103.2	83.0	67.9	53.9	40.2	31.7	19.7	15.3	12.4	10.1	8.76	7.03	6.00	3.12
1.75V/cell	155.4	113.4	90.6	73.0	55.9	41.7	33.2	20.4	15.6	12.7	10.3	9.00	7.15	6.06	3.15
1.70V/cell	171.1	123.5	96.7	76.7	58.2	43.4	34.2	21.2	16.1	13.0	10.6	9.19	7.25	6.12	3.21
1.65V/cell	188.7	133.3	102.9	81.5	61.4	44.4	35.3	21.8	16.7	13.5	10.9	9.39	7.37	6.25	3.25
1.60V/cell	208.2	144.8	110.0	86.9	64.8	46.3	36.6	22.5	17.2	13.9	11.2	9.59	7.44	6.31	3.27

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

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	187.8	149.1	128.1	108.2	87.0	66.4	54.6	35.0	27.8	22.7	18.4	16.0	13.1	11.2	6.12
1.80V/cell	249.3	188.3	152.7	126.1	101.1	76.6	60.8	37.9	29.7	24.2	19.7	17.1	13.8	11.9	6.17
1.75V/cell	275.2	203.6	164.8	134.3	104.1	78.8	63.3	39.2	30.1	24.6	20.1	17.6	14.0	12.0	6.22
1.70V/cell	294.6	216.9	173.5	140.1	107.7	81.6	65.1	40.7	30.9	25.2	20.6	17.9	14.2	12.1	6.34
1.65V/cell	320.2	231.9	183.0	147.7	112.7	82.9	66.8	41.6	32.1	26.0	21.1	18.2	14.4	12.3	6.41
1.60V/cell	345.1	246.0	192.5	155.7	118.2	85.9	68.8	42.7	32.9	26.7	21.7	18.6	14.5	12.4	6.44

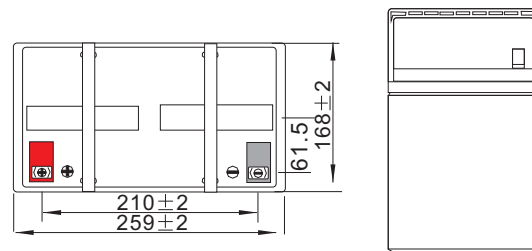
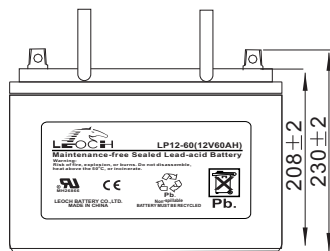
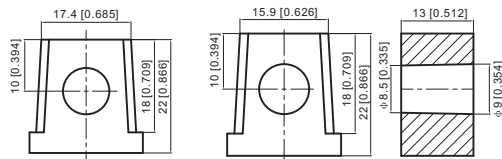
## Dimensions

### T14 Terminal

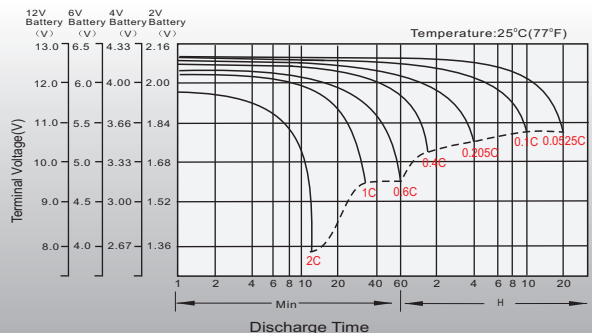
Unit: mm [inches]

#### T14-1 Positive

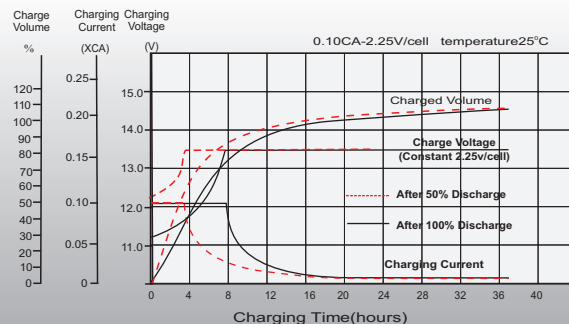
#### T14-2 Negative



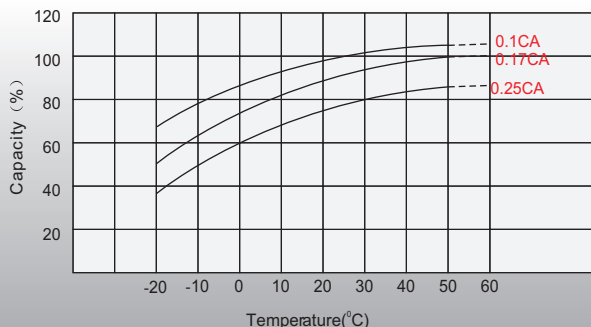
## Discharge Characteristics



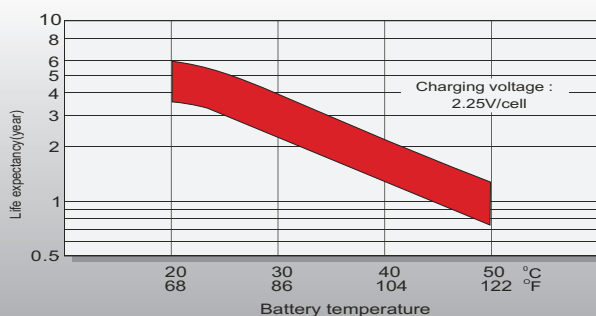
## Float Charging Characteristics



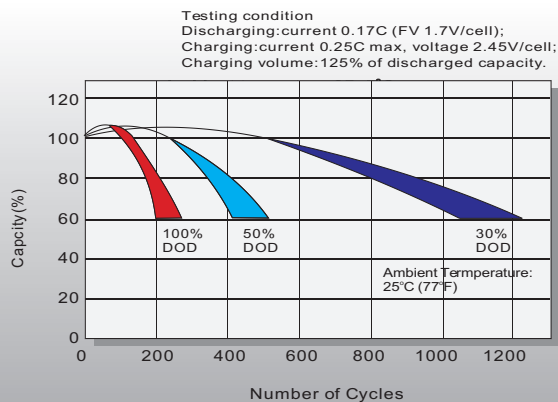
## Temperature Effects in Relation to Battery Capacity



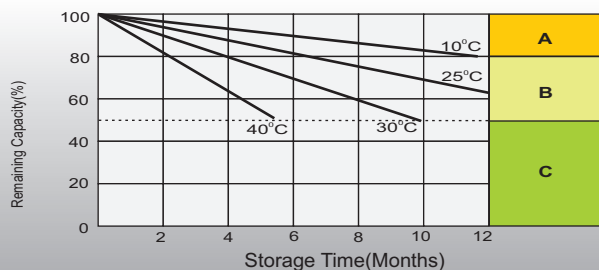
## Effect of Temperature on Long Term Float Life



## 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.

## Sales Office

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