

# LP SERIES-General Purpose

## LP12-100 (12V100AH)

### Specification

Nominal Voltage	12V	
Nominal Capacity(10HR)	100.0AH	
Dimension	Length	330 ± 3mm (12.99 inches)
	Width	173 ± 2mm (6.81 inches)
	Container Height	212 ± 2mm (8.35 inches)
	Total Height (with Terminal)	220 ± 2mm (8.66 inches)
Approx Weight	Approx 30.0 kg (66.15lbs)	
Terminal	T11	
Container Material	ABS	
Rated Capacity	104.0 AH/5.20A	(20hr, 1.80V/cell, 25°C/77°F)
	100.0 AH/10.0A	(10hr, 1.80V/cell, 25°C/77°F)
	88.0 AH/17.6A	(5hr, 1.75V/cell, 25°C/77°F)
	76.2 AH/25.4A	(3hr, 1.75V/cell, 25°C/77°F)
	65.1 AH/65.1A	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	1200A (5s)	
Internal Resistance	Approx 4.9mΩ	
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 30.0A. 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	208.8	161.4	136.4	117.0	88.4	65.7	53.0	31.3	23.5	19.2	16.4	14.4	11.6	9.65	5.13
1.80V/cell	246.0	180.0	150.8	126.6	94.2	69.6	55.9	33.1	24.6	20.2	17.2	15.0	12.0	10.0	5.20
1.75V/cell	278.4	197.4	162.0	134.7	99.0	72.7	58.0	34.4	25.4	20.7	17.6	15.3	12.2	10.1	5.29
1.70V/cell	318.0	214.8	174.4	143.4	104.6	76.0	60.4	35.3	26.0	21.2	17.9	15.6	12.4	10.2	5.34
1.65V/cell	356.4	232.2	185.6	151.5	110.0	79.2	63.0	36.3	26.7	21.7	18.3	15.9	12.6	10.3	5.40
1.60V/cell	405.6	254.4	197.2	159.9	115.8	82.4	65.1	37.5	27.6	22.2	18.6	16.2	12.7	10.5	5.45

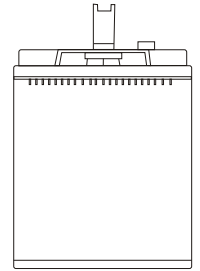
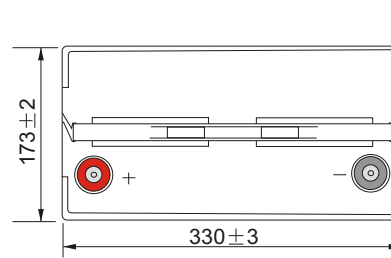
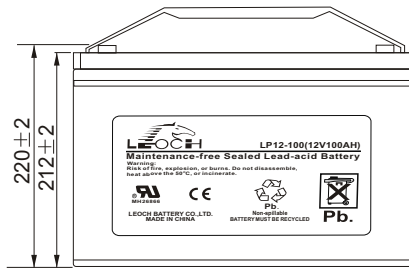
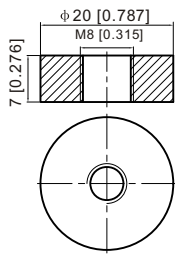
### Constant Power Discharge (Watts) at 25 °C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	381.8	298.1	254.5	220.5	168.5	126.4	102.2	60.8	45.7	37.5	32.2	28.2	22.9	19.1	10.15
1.80V/cell	445.0	328.6	277.6	235.1	176.8	132.7	107.2	63.8	47.7	39.2	33.6	29.4	23.7	19.8	10.29
1.75V/cell	492.9	354.6	294.6	247.8	184.3	137.3	110.8	66.0	49.1	40.1	34.3	29.9	24.0	19.9	10.45
1.70V/cell	547.4	377.1	312.7	261.8	193.6	143.0	115.0	67.6	50.1	41.0	34.8	30.4	24.3	20.1	10.54
1.65V/cell	604.8	403.9	330.2	274.5	201.9	147.7	119.1	69.2	51.3	41.8	35.3	30.8	24.6	20.3	10.64
1.60V/cell	672.4	432.4	345.1	286.6	211.1	152.9	122.4	71.1	52.7	42.6	35.9	31.3	24.8	20.5	10.73

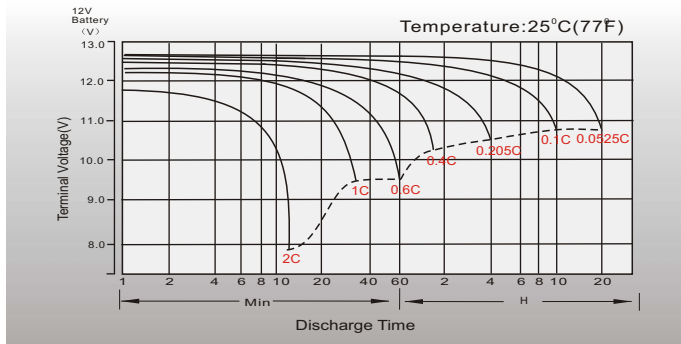
## Dimensions

### T11 Terminal

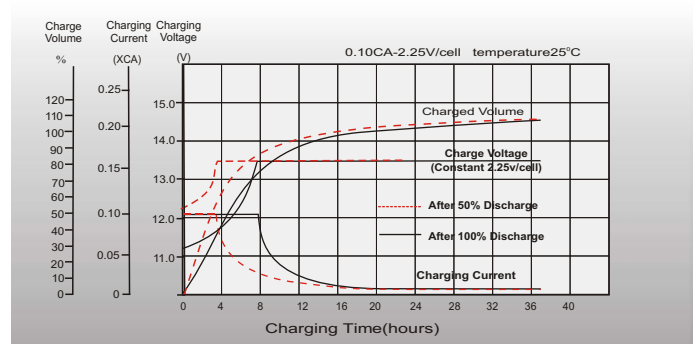
Unit: mm [inches]



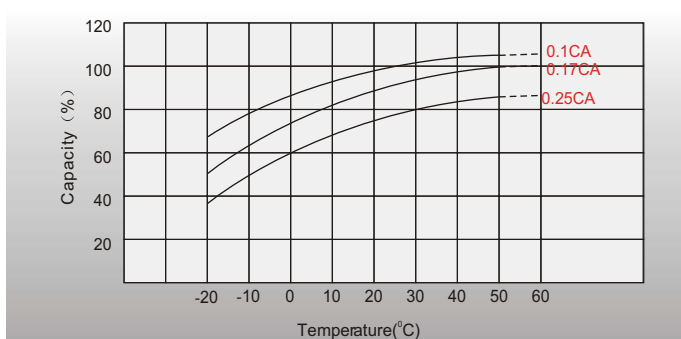
## Discharge Characteristics



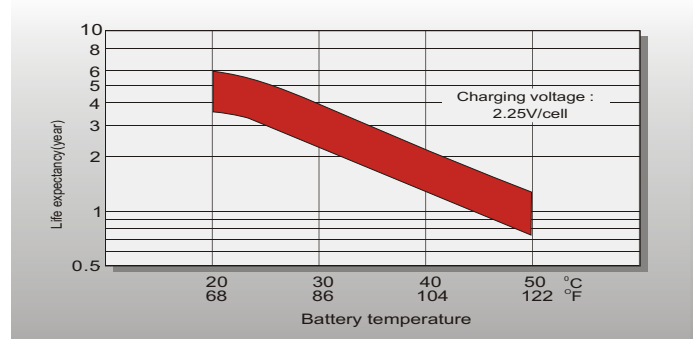
## Float Charging Characteristics



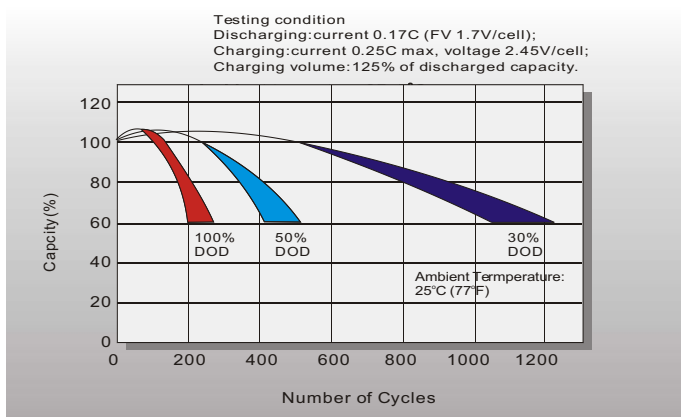
## Temperature Effects in Relation to Battery Capacity



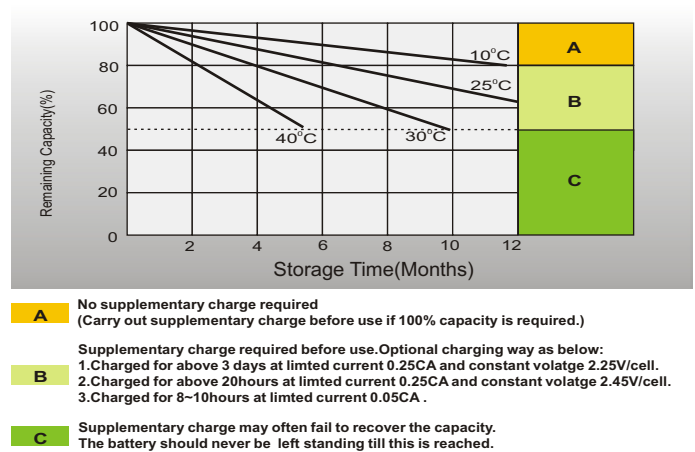
## Effect of Temperature on Long Term Float Life



## Cycle Life in Relation to Depth of Discharge



## Self Discharge Characteristics



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