

# LP SERIES-General Purpose

## LP12-2.0C1 (12V2.0AH)



### Specification

Nominal Voltage	12V	
Nominal Capacity(20HR)	2.0AH	
Dimension	Length	143±2mm (5.63 inches)
	Width	24±1mm (0.94 inches)
	Container Height	65±1mm (2.56 inches)
	Total Height (with Terminal)	65±1mm (2.56 inches)
Approx Weight	Approx 0.57 kg (1.26lbs)	
Terminal	/	
Container Material	ABS	
Rated Capacity	2.00 AH/0.10A	(20hr, 1.80V/cell, 25°C/77°F)
	1.86 AH/0.186A	(10hr, 1.80V/cell, 25°C/77°F)
	1.70 AH/0.34A	(5hr, 1.75V/cell, 25°C/77°F)
	1.53 AH/0.51A	(3hr, 1.75V/cell, 25°C/77°F)
	1.26 AH/1.26A	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	30A (5s)	
Internal Resistance	Approx 70mΩ	
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 0.6A. 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	3.81	2.92	2.42	2.09	1.62	1.19	1.01	0.59	0.47	0.38	0.309	0.268	0.216	0.180	0.099
1.80V/cell	5.11	3.74	2.93	2.48	1.91	1.39	1.13	0.65	0.50	0.40	0.331	0.287	0.229	0.186	0.100
1.75V/cell	5.76	4.11	3.20	2.66	1.98	1.44	1.18	0.67	0.51	0.41	0.340	0.295	0.233	0.191	0.101
1.70V/cell	6.35	4.48	3.41	2.80	2.07	1.50	1.22	0.69	0.52	0.42	0.349	0.301	0.236	0.195	0.103
1.65V/cell	7.00	4.83	3.63	2.97	2.18	1.54	1.24	0.70	0.55	0.44	0.358	0.308	0.240	0.199	0.104
1.60V/cell	7.72	5.24	3.88	3.17	2.30	1.60	1.26	0.73	0.56	0.45	0.370	0.314	0.242	0.201	0.105

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

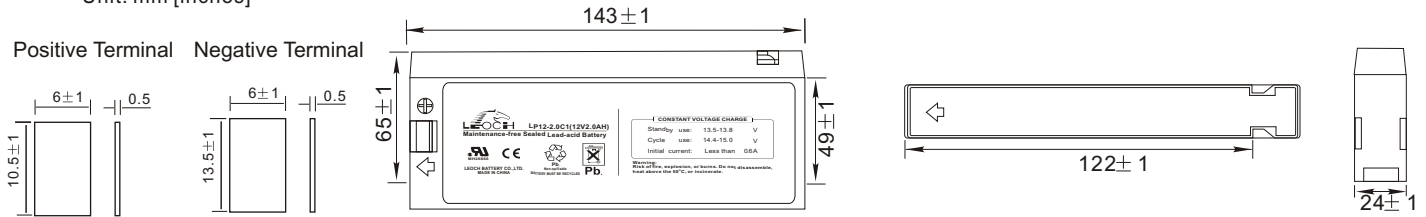
F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	6.96	5.40	4.52	3.95	3.09	2.29	1.94	1.16	0.91	0.74	0.61	0.53	0.426	0.357	0.196
1.80V/cell	9.25	6.82	5.39	4.60	3.59	2.65	2.16	1.25	0.97	0.79	0.65	0.56	0.451	0.368	0.198
1.75V/cell	10.20	7.38	5.81	4.90	3.69	2.72	2.25	1.29	0.98	0.80	0.66	0.58	0.458	0.377	0.200
1.70V/cell	10.93	7.86	6.12	5.11	3.82	2.82	2.31	1.32	1.01	0.82	0.68	0.59	0.464	0.384	0.203
1.65V/cell	11.88	8.40	6.46	5.39	4.00	2.86	2.35	1.33	1.05	0.85	0.69	0.60	0.470	0.391	0.205
1.60V/cell	12.80	8.91	6.79	5.68	4.19	2.97	2.36	1.39	1.08	0.87	0.71	0.61	0.473	0.395	0.206

# Dimensions

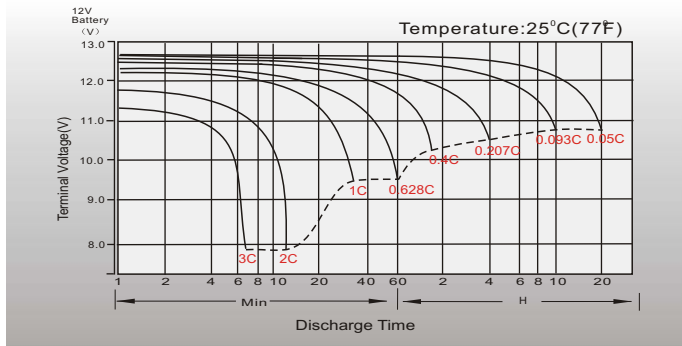
## Terminal

Unit: mm [inches]

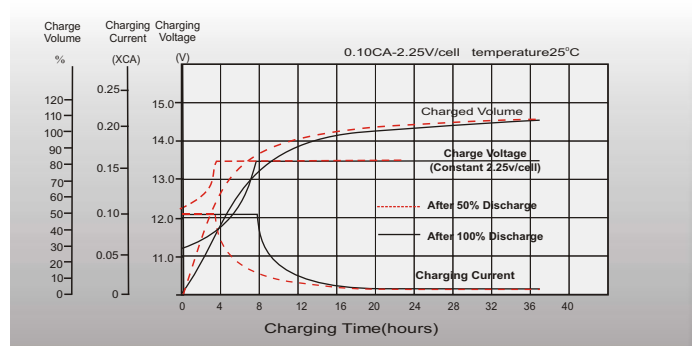
Positive Terminal Negative Terminal



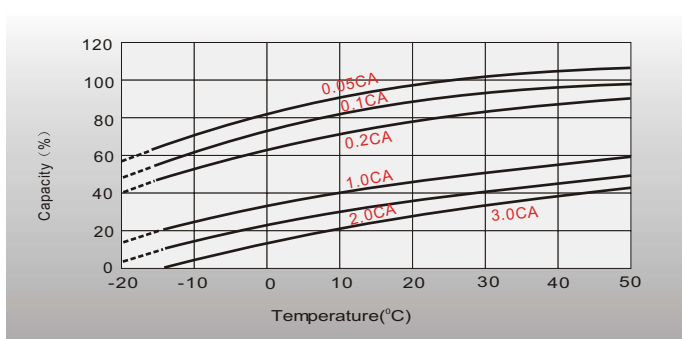
## Discharge Characteristics



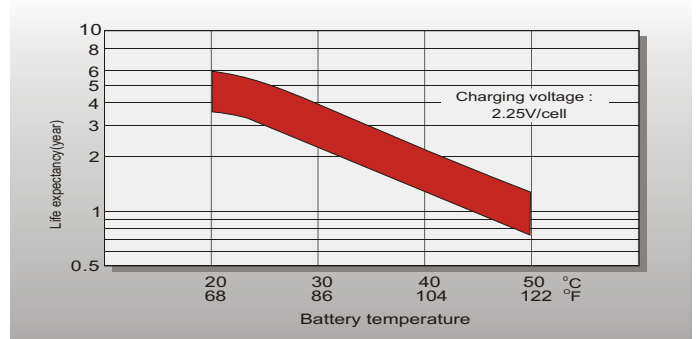
## Float Charging Characteristics



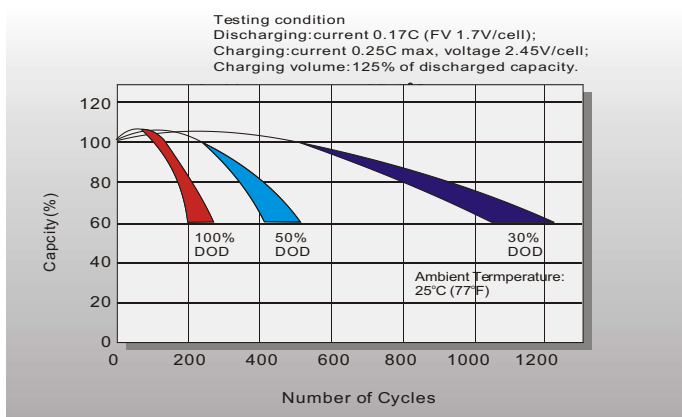
## Temperature Effects in Relation to Battery Capacity



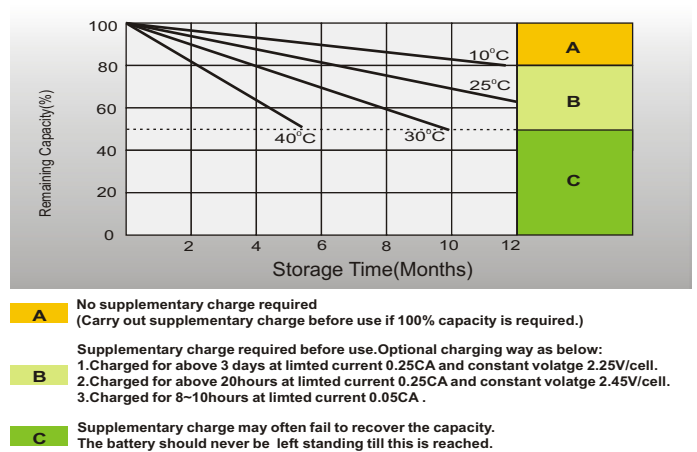
## Effect of Temperature on Long Term Float Life



## Cycle Life in Relation to Depth of Discharge



## Self Discharge Characteristics



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