

LP SERIES-General Purpose

LP12-5.0H (12V5.0AH)

Specification

Nominal Voltage	12V	
Nominal Capacity(20HR)	5.0AH	
Dimension	Length	140±1mm (5.51 inches)
	Width	39±1mm (1.54 inches)
	Container Height	124±1mm (4.88 inches)
	Total Height (with Terminal)	130±1mm (5.12 inches)
Approx Weight	Approx 1.9 kg (4.19lbs)	
Terminal	T2	
Container Material	ABS	
Rated Capacity	8.50 AH/0.425A	(20hr, 1.80V/cell, 25°C/77°F)
	7.91 AH/0.791A	(10hr, 1.80V/cell, 25°C/77°F)
	7.22 AH/1.45A	(5hr, 1.75V/cell, 25°C/77°F)
	6.50 AH/2.17A	(3hr, 1.75V/cell, 25°C/77°F)
	5.34 AH/5.34A	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	75A (5s)	
Internal Resistance	Approx 30mΩ	
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 1.5A. 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	9.52	7.31	6.06	5.24	4.05	2.98	2.51	1.49	1.16	0.95	0.77	0.67	0.540	0.451	0.248
1.80V/cell	12.8	9.34	7.32	6.19	4.78	3.47	2.82	1.62	1.25	1.01	0.83	0.72	0.573	0.465	0.250
1.75V/cell	14.4	10.3	7.99	6.66	4.96	3.60	2.95	1.68	1.28	1.03	0.85	0.74	0.583	0.478	0.253
1.70V/cell	15.9	11.2	8.53	7.00	5.16	3.74	3.04	1.73	1.31	1.06	0.87	0.75	0.591	0.487	0.257
1.65V/cell	17.5	12.1	9.07	7.44	5.45	3.84	3.11	1.75	1.37	1.10	0.90	0.77	0.600	0.497	0.261
1.60V/cell	19.3	13.1	9.71	7.92	5.75	4.00	3.14	1.83	1.41	1.13	0.93	0.79	0.606	0.503	0.262

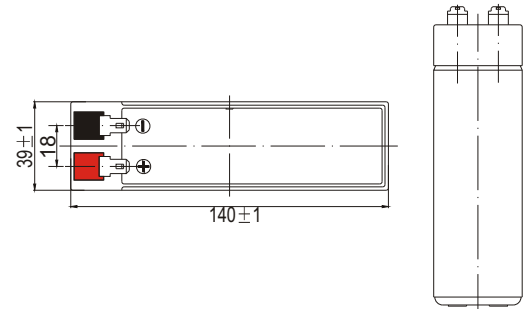
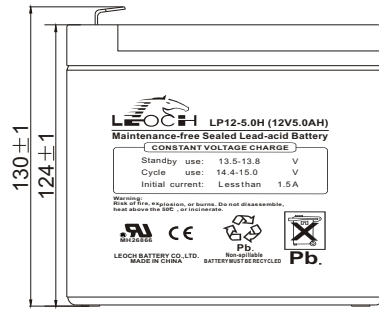
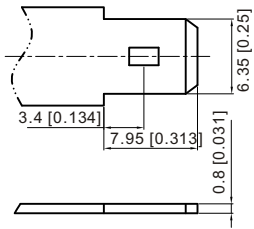
Constant Power Discharge (Watts) at 25 °C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	17.4	13.5	11.3	9.87	7.72	5.73	4.85	2.89	2.27	1.85	1.51	1.32	1.066	0.893	0.490
1.80V/cell	23.1	17.1	13.5	11.5	8.97	6.62	5.40	3.13	2.43	1.96	1.62	1.41	1.127	0.919	0.495
1.75V/cell	25.5	18.4	14.5	12.3	9.23	6.80	5.63	3.23	2.46	2.00	1.65	1.44	1.144	0.942	0.499
1.70V/cell	27.3	19.6	15.3	12.8	9.56	7.05	5.79	3.31	2.53	2.05	1.69	1.47	1.159	0.960	0.507
1.65V/cell	29.7	21.0	16.1	13.5	10.0	7.16	5.88	3.34	2.62	2.11	1.73	1.50	1.174	0.979	0.514
1.60V/cell	32.0	22.3	17.0	14.2	10.5	7.42	5.90	3.46	2.69	2.17	1.78	1.52	1.183	0.988	0.516

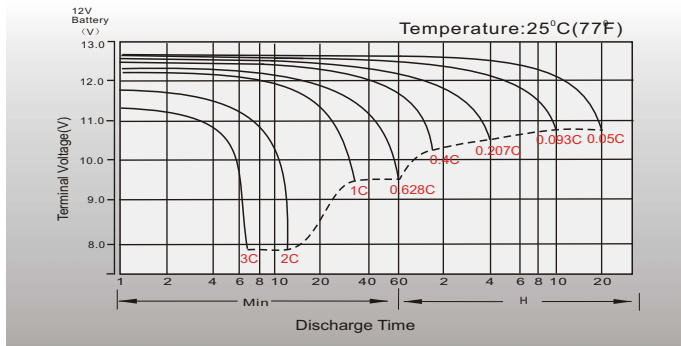
Dimensions

T2 Terminal

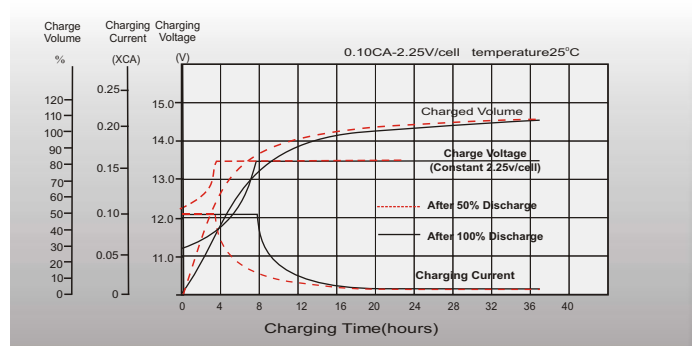
Unit: mm [inches]



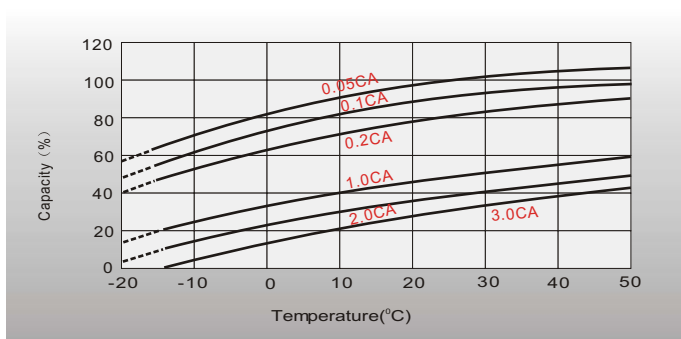
Discharge Characteristics



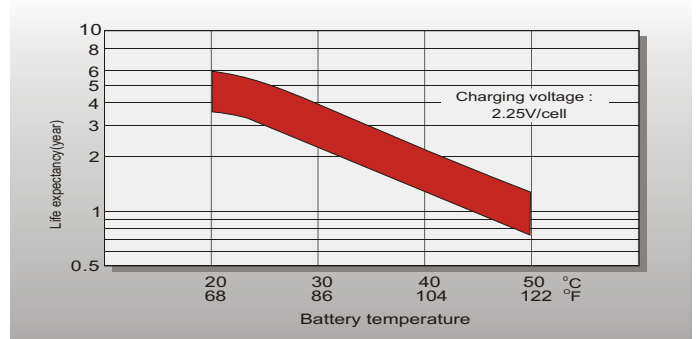
Float Charging Characteristics



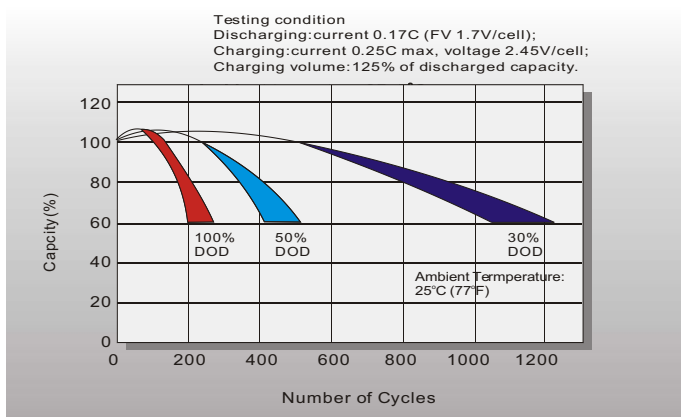
Temperature Effects in Relation to Battery Capacity



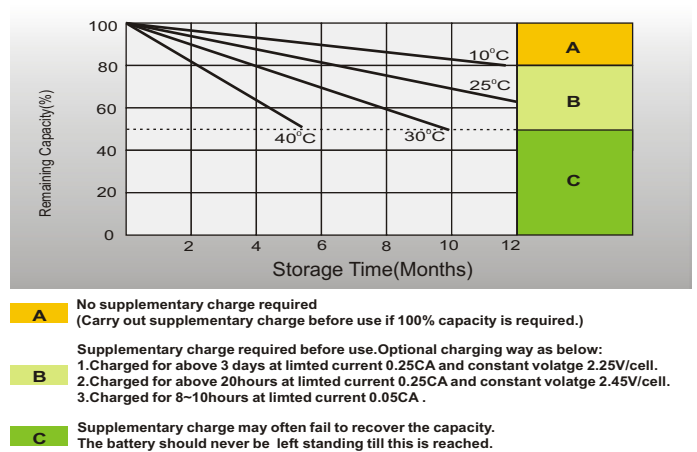
Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics



Sales Office

China sales office:

Add: 5th Floor, Xinbaohui Bldg., Nanhai Blvd.,
Nanshan, Shenzhen, China. 518052
Tel: +86-755-86036060 (100 lines)
Fax: +86-755-26067269
E-mail: export@leoch.com
Http://www.leoch.com

North America sales office:

Add: 19751 Descartes, Unit A,
Foothill Ranch, CA 92610, USA
Tel: 949-588-5853
Fax: 949-588-5966
E-mail: sales@leoch.us
Http://www.leoch.us

Europe sales office:

Add: 9B Wheatstone Park, Waterwells
Business Park, Gloucester, GL2 2AQ. UK.
Tel: +44(0) 1452 729428
Fax: +44 (0)1452-690125
E-mail: Sales.Europe@leoch.com