

LP SERIES-General Purpose

LP12-100E (12V100AH)

Specification

Nominal Voltage	12V	
Nominal Capacity(10HR)	100.0AH	
Dimensions	Length	330±3mm (12.99 inches)
	Width	173±2mm (6.81 inches)
	Container Height	213±3mm (8.39 inches)
	Total Height (with Terminal)	220±3mm (8.66 inches)
Approx Weight	Approx 28.2 kg (62.2lbs)	
Terminal	T11	
Container Material	ABS	
Rated Capacity	105.0 AH/5.25A	(20hr , 1.80V/cell,25°C/77°F)
	100.0 AH/10.0A	(10hr, 1.80V/cell,25°C/77°F)
	87.0 AH/17.4A	(5hr, 1.75V/cell,25°C/77°F)
	76.5 AH/25.5A	(3hr, 1.75V/cell,25°C/77°F)
	62.6 AH/62.6A	(1hr, 1.67V/cell,25°C/77°F)
Max. Discharge Current	1000A (5s)	
Internal Resistance	Approx 4.9mΩ	
Operating Temp.Range	Discharge	-20~55°C (-4~131°F)
	Charge	0~40°C (32~104°F)
	Storage	-15~50°C (5~122°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	15min	20min	30min	1h	1.5h	2h	3h	4h	5h	8h	10h	20h
1.85V/cell	149.7	116.8	80.9	51.5	34.8	29.3	23.6	19.0	16.3	11.5	9.20	4.83
1.80V/cell	166.9	130.2	90.1	54.5	36.7	30.9	25.0	19.9	16.9	11.8	10.0	5.25
1.75V/cell	174.2	135.8	94.0	57.8	38.9	32.3	25.5	20.7	17.4	12.0	10.1	5.30
1.70V/cell	176.3	137.5	95.2	60.5	40.6	33.5	26.3	21.2	17.7	12.2	10.2	5.36
1.67V/cell	179.0	139.7	96.7	62.6	42.1	34.5	27.1	21.7	18.0	12.3	10.3	5.41
1.60V/cell	181.8	141.8	98.1	63.3	43.1	35.1	27.5	22.0	18.3	12.4	10.4	5.46

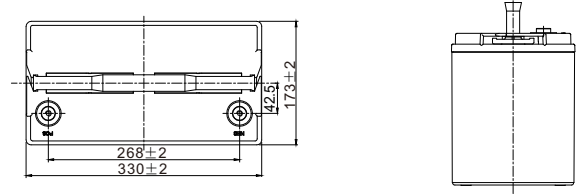
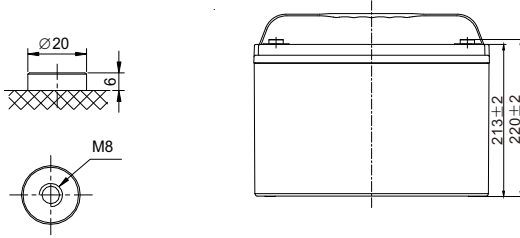
Constant Power Discharge (Watts/cell) at 25 °C (77°F)

F.V/Time	15min	20min	30min	1h	1.5h	2h	3h	4h	5h	8h	10h	20h
1.85V/cell	274.5	214.1	148.3	82.7	63.0	51.9	39.6	32.5	29.8	19.6	16.4	8.62
1.80V/cell	306.0	238.7	165.2	88.9	67.9	56.0	42.4	34.4	31.5	20.3	16.7	8.76
1.75V/cell	319.3	249.1	172.4	93.5	70.9	58.1	43.7	35.5	32.5	20.5	16.9	8.86
1.70V/cell	323.3	252.2	174.6	97.7	73.3	59.6	44.9	36.5	33.2	20.7	17.1	8.96
1.67V/cell	328.3	256.0	177.3	102.0	76.0	61.3	46.2	37.4	33.6	20.9	17.3	9.06
1.60V/cell	333.2	259.9	179.9	106.1	78.3	62.6	47.2	37.9	34.0	21.3	17.5	9.21

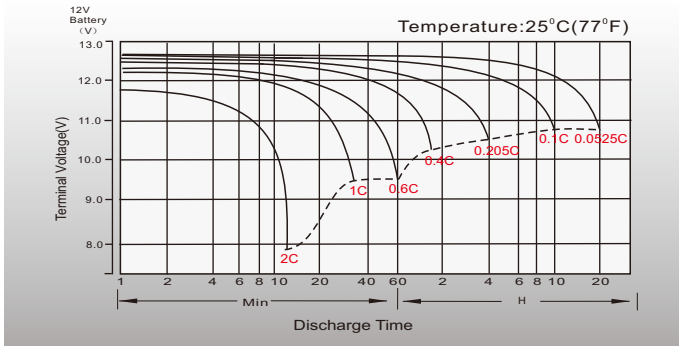
Dimensions

T11 Terminal

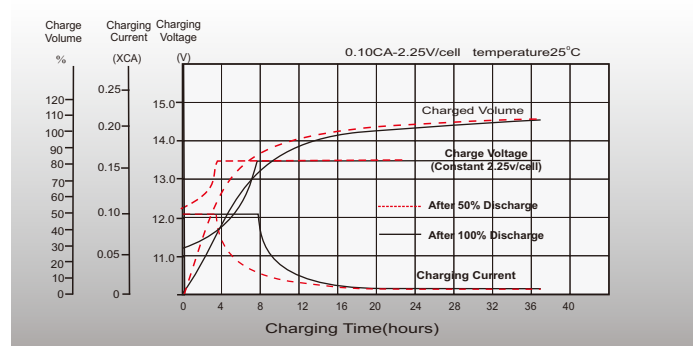
Unit: mm



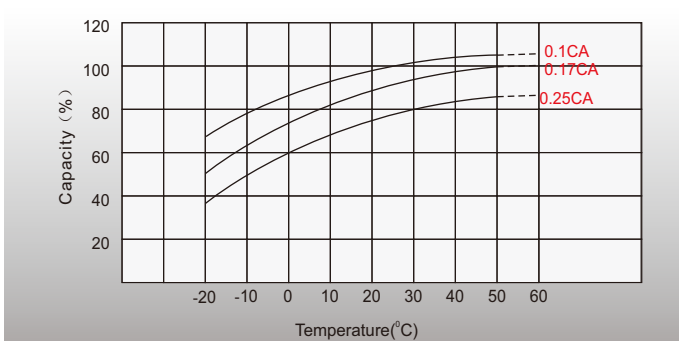
Discharge Characteristics



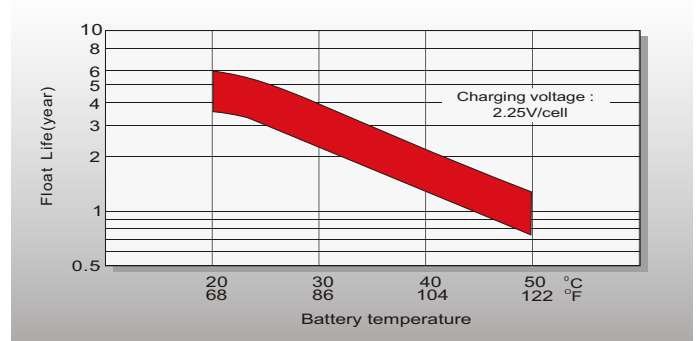
Float Charging Characteristics



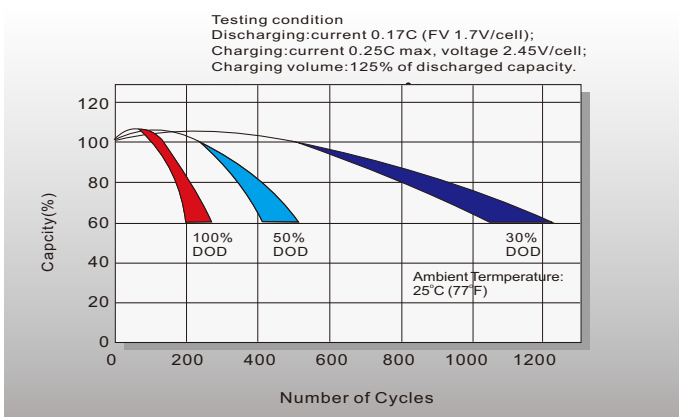
Temperature Effects in Relation to Battery Capacity



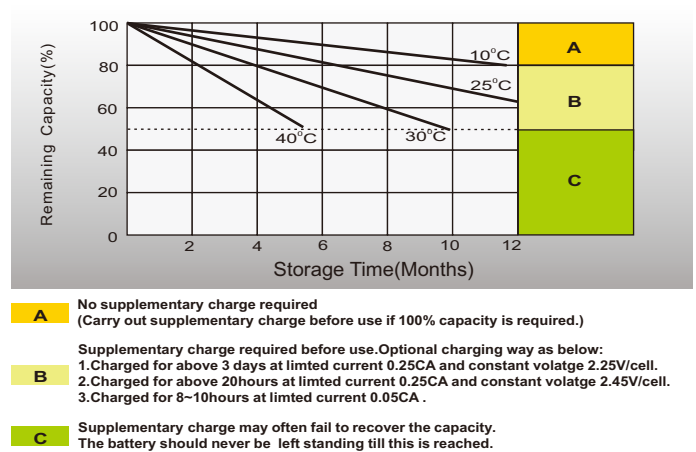
Effect of Temperature on Long Term Float Life



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

HongKong sales office:

Workshop C, 33/F, TML Tower,
No. 3 Hoi Shing Road, Tsuen Wan,
New Territories, Hong Kong
Tel: +852 35786666
Fax: +852 21170016
E-mail: sales.hk@leoch.com

Singapore sales office:

Add: No. 1 Tech Park Crescent,
Singapore 638131
Tel: +65 68636078
Fax: +65 68636079
Email sales.sg@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.com

Europe sales office:

Add: 9B Wheatstone Court. Waterwells
Business Park, Gloucester, GL2-2AQ,
UK United Kingdom
Tel: +44(0) 1452 729428 / 1452 729696
Fax: +44 (0)1452-690125
E-mail: Sales.Europe@leoch.com