

### Specification

Nominal Voltage	12V	
Watts(15min Rate)	81.4 Watts at 1.67V/cell	
Dimension	Length	181.5±2mm (7.14 inches)
	Width	77±1mm (3.03 inches)
	Container Height	166.5±2mm (6.56 inches)
	Total Height (with Terminal)	166.5±2mm (6.56 inches)
Approx Weight	Approx 6.9 kg (15.2lbs)	
Terminal	T12	
Container Material	ABS	
Rated Capacity	20.4 AH/2.04A	(10hr , 1.80V/cell, 25°C/77°F)
	20.0 AH/2.50A	(8hr, 1.80V/cell, 25°C/77°F)
	18.5 AH/3.71A	(5hr, 1.75V/cell, 25°C/77°F)
	16.4 AH/5.47A	(3hr, 1.75V/cell, 25°C/77°F)
	13.9 AH/13.9A	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	300A (5s)	
Internal Resistance	Approx 15mΩ	
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	6.0A. 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 LPX 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

- ◆ UPS (High rate)
- ◆ High power backup supply
- ◆ Emergency power supply
- ◆ Starting system
- ◆ Power tools
- ◆ Emergency lighting
- ◆ Electric starting



### 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	53.4	39.1	32.9	27.9	21.2	15.6	12.4	7.07	5.16	4.11	3.46	3.01	2.42	2.00	1.04
1.80V/cell	62.2	43.9	36.5	30.0	22.3	16.1	12.8	7.35	5.35	4.29	3.62	3.15	2.50	2.04	1.06
1.75V/cell	69.3	47.4	39.5	31.9	23.2	16.7	13.1	7.55	5.47	4.40	3.71	3.21	2.54	2.07	1.07
1.70V/cell	74.9	50.8	41.8	33.2	23.7	17.0	13.5	7.67	5.57	4.48	3.76	3.26	2.57	2.10	1.09
1.67V/cell	80.9	54.4	44.0	34.6	24.3	17.3	13.7	7.83	5.69	4.56	3.82	3.31	2.60	2.13	1.10
1.60V/cell	85.9	57.6	45.7	35.8	24.9	17.7	13.9	7.98	5.78	4.64	3.88	3.34	2.63	2.15	1.11

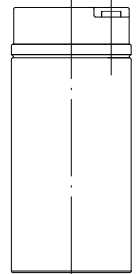
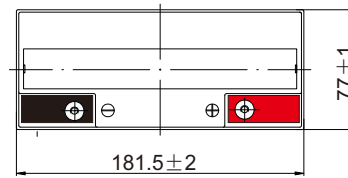
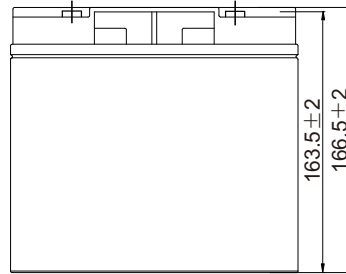
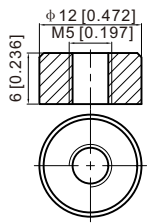
### Constant Power Discharge (Watts/cell) at 25 °C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	100.7	74.5	63.3	54.1	41.4	30.5	24.3	14.0	10.3	8.19	6.92	6.04	4.87	4.03	2.11
1.80V/cell	116.3	83.0	69.7	57.8	43.3	31.5	25.1	14.5	10.6	8.53	7.21	6.29	5.01	4.10	2.13
1.75V/cell	128.3	89.0	75.0	61.2	44.8	32.5	25.7	14.9	10.8	8.72	7.36	6.39	5.07	4.15	2.15
1.70V/cell	136.8	94.0	78.5	63.0	45.4	32.9	26.2	15.0	10.9	8.80	7.41	6.43	5.10	4.16	2.16
1.67V/cell	145.2	99.2	81.4	64.9	46.0	33.1	26.4	15.1	11.1	8.90	7.48	6.49	5.11	4.17	2.17
1.60V/cell	150.6	102.8	82.9	65.7	46.3	33.3	26.4	15.2	11.1	8.92	7.48	6.47	5.09	4.18	2.18

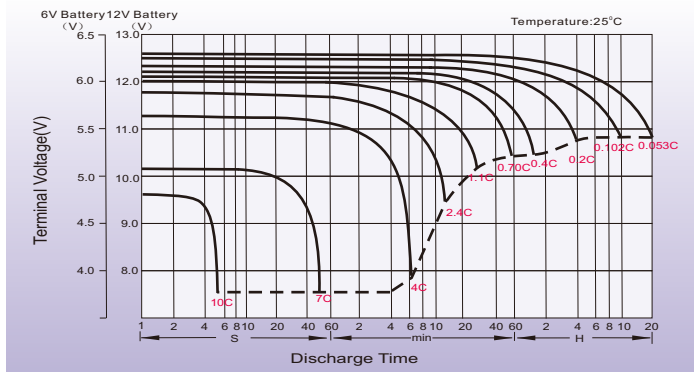
## Dimensions

### T12 Terminal

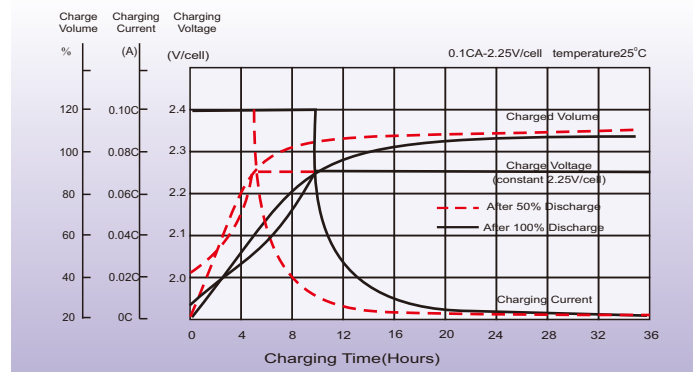
Unit: mm [inches]



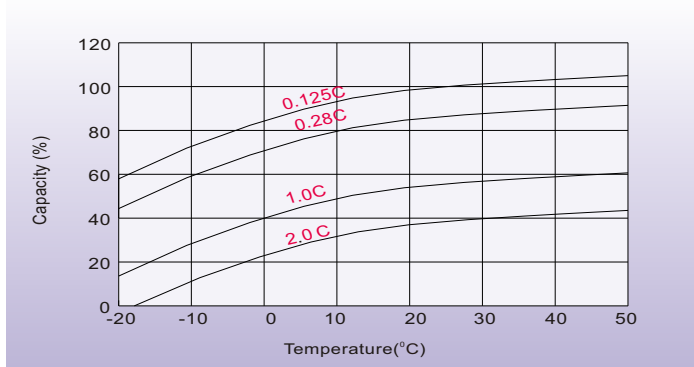
## Discharge Characteristics



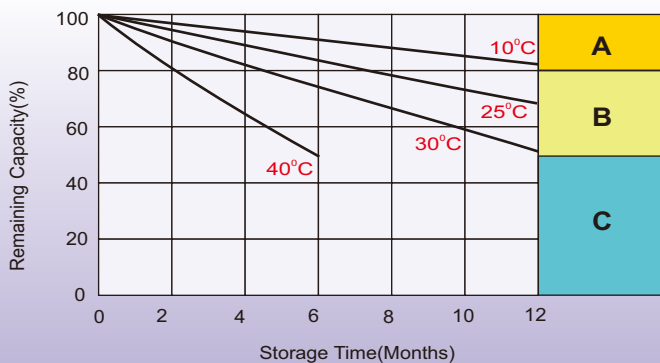
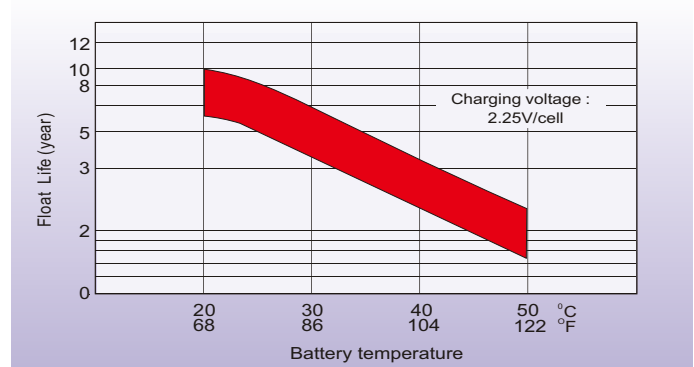
## Float Charging Characteristics



## Temperature Effects in Relation to Battery Capacity



## Effect of Temperature on Long Term Float Life



## 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

### 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.us

### 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