

LPL SERIES-Long Life Standby

LPL12-28H (12V28AH)

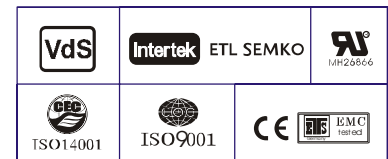
Specification

Nominal Voltage	12V	
Nominal Capacity(20HR)	28.0AH at 25°C	
Dimension	Length	164±2mm (6.46 inches)
	Width	125±2mm (4.92 inches)
	Container Height	175±2mm (6.89 inches)
	Total Height (with Terminal)	175±2mm (6.89 inches)
Approx Weight	Approx 9.1 Kg (20.1 lbs)	
Terminal	T12	
Container Material	ABS	
Rated Capacity	27.2AH/1.36A	(20hr, 1.80V/cell, 20°C/68°F)
	25.3AH/2.53A	(10hr, 1.80V/cell, 20°C/68°F)
	24.3 AH/4.86A	(5hr, 1.75V/cell, 20°C/68°F)
	20.5AH/6.85A	(3hr, 1.75V/cell, 20°C/68°F)
	16.7 AH/16.7A	(1hr, 1.60V/cell, 20°C/68°F)
Max. Discharge Current	420A (5s)	
Internal Resistance	Approx 12.0mΩ	
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 8.4A. 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 LPL 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 and EPS
- ◆ Emergency light
- ◆ Railway signal and aircraft signal system
- ◆ Marine and powerstations
- ◆ Alarm and security system
- ◆ Electronic apparatus and equipment
- ◆ Communication power supply, DC power supply



Constant Current Discharge (Amperes) at 20 °C (68°F)

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	38.9	32.3	27.9	21.6	15.9	13.4	8.00	6.26	5.09	4.19	3.64	2.93	2.45	1.35
1.80V/cell	49.8	39.0	33.0	25.5	18.5	15.0	8.73	6.73	5.43	4.50	3.90	3.11	2.53	1.36
1.75V/cell	54.8	42.7	35.5	26.5	19.2	15.7	9.04	6.85	5.55	4.62	4.01	3.17	2.60	1.37
1.70V/cell	59.7	45.5	37.3	27.5	20.0	16.2	9.27	7.00	5.70	4.74	4.10	3.21	2.65	1.40
1.65V/cell	64.4	48.4	39.6	29.0	20.5	16.6	9.41	7.34	5.89	4.86	4.18	3.26	2.70	1.42
1.60V/cell	69.9	51.7	42.3	30.7	21.3	16.7	9.81	7.56	6.08	5.03	4.27	3.29	2.73	1.42

Constant Power Discharge (Watts/cell) at 20 °C (68°F)

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	72.0	60.3	52.7	41.1	30.6	25.9	15.5	12.2	9.95	8.22	7.15	5.80	4.85	2.67
1.80V/cell	90.9	71.8	61.3	47.8	35.3	28.9	16.8	13.0	10.6	8.79	7.64	6.13	5.00	2.69
1.75V/cell	98.4	77.5	65.3	49.2	36.3	30.0	17.4	13.2	10.8	8.99	7.82	6.22	5.13	2.71
1.70V/cell	104.8	81.6	68.2	50.9	37.6	30.9	17.8	13.6	11.0	9.20	7.98	6.30	5.22	2.76
1.65V/cell	112.0	86.1	71.8	53.3	38.2	31.3	17.9	14.1	11.4	9.42	8.13	6.39	5.32	2.79
1.60V/cell	118.8	90.6	75.7	55.9	39.6	31.5	18.6	14.5	11.7	9.70	8.28	6.44	5.37	2.80

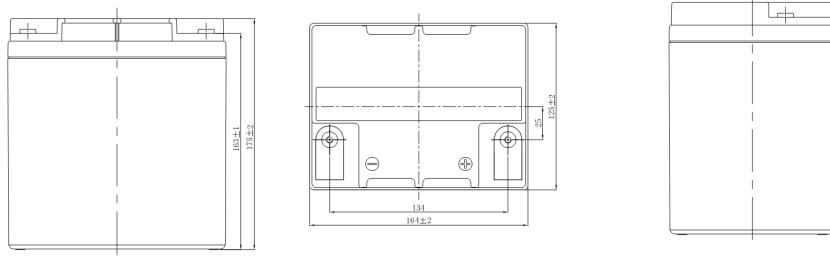
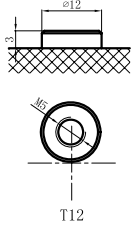
Specifications subject to change without notice.



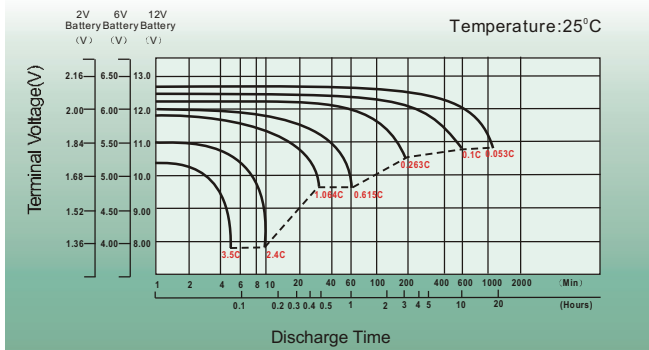
Dimensions

T12 Terminal

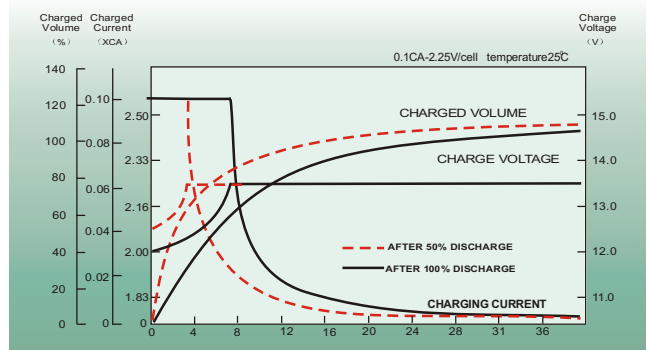
Unit: mm [inches]



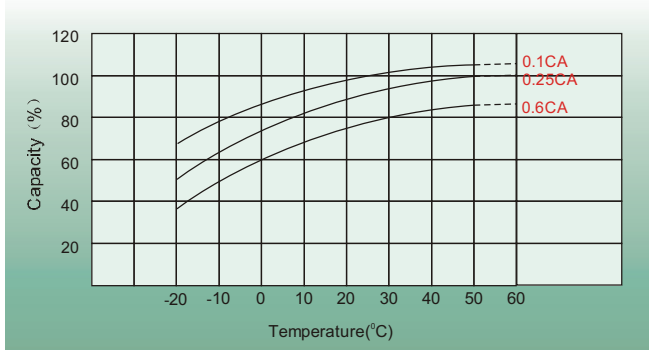
Discharge Characteristics



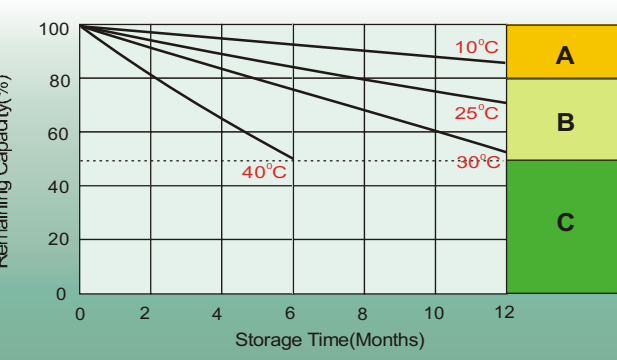
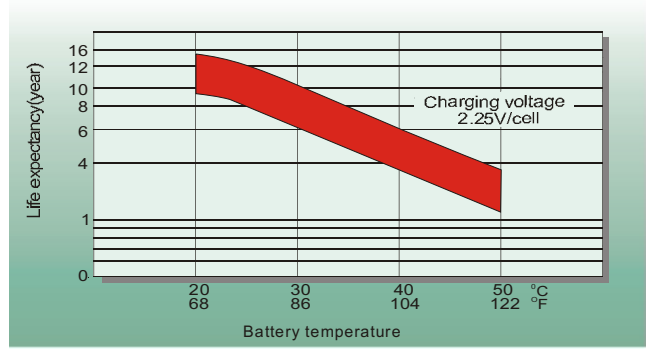
Float Charging Characteristics



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

<p>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</p>	<p>HongKong sales office: Add: 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</p>	<p>Singapore sales office: Add: No. 1 Tech Park Crescent, Singapore 638131 Tel: +65 68416629 Fax: +65 68443210 Email: sales.sg@leoch.com</p>	<p>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</p>	<p>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</p>
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