

# LPFG SERIES- Front Terminal GEL

## LPFG12-100 (12V90AH)



### Specification

Nominal Voltage	12V	
Nominal Capacity(20HR)	90.0AH	
Dimension	Length	508±3mm (20.0 inches)
	Width	110±2mm (4.33 inches)
	Container Height	238.5±3mm (9.39 inches)
	Total Height (with Terminal)	238.5±3mm (9.39 inches)
Approx Weight	Approx 32.3 kg (71.2lbs)	
Terminal	T13	
Container Material	ABS	
Rated Capacity	90.0 AH/4.5A	(20hr, 1.80V/cell, 25°C/77°F)
	85.0 AH/8.5A	(10hr, 1.80V/cell, 25°C/77°F)
	74.5 AH/14.9A	(5hr, 1.75V/cell, 25°C/77°F)
	64.8 AH/21.6A	(3hr, 1.75V/cell, 25°C/77°F)
	49.1 AH/49.1A	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	900A (5s)	
Internal Resistance	Approx 5.6mΩ	
Operating Temp. Range	Discharge	-20~55°C (-4~131°F)
	Charge	0~40°C (32~104°F)
	Storage	-20~50°C (-4~122°F)
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Cycle Use	Initial Charging Current less than 22.5A. 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 LPFG series batteries may be stored for up to 9 months at 25°C(77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	

### Applications

- ◆ Telecom application( 19 inches or 23 inches power cabinets )
- ◆ UPS, Standby power supply
- ◆ Systems Solar Power
- ◆ Network connection equipment of communication system
- ◆ Power station systems
- ◆ Railway and marine systems
- ◆ Cable TV



### Constant Current Discharge (Amperes) at 25 °C (77°F)

F.V/Time	20min	30min	45min	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	20h
1.85V/cell	71.1	55.8	42.6	35.6	25.0	19.1	15.8	13.6	11.7	10.4	9.37	8.57	8.14	4.32
1.80V/cell	81.4	62.4	46.9	39.3	27.1	20.4	16.8	14.3	12.3	10.9	9.82	9.01	8.50	4.50
1.75V/cell	91.5	68.6	50.8	42.1	28.7	21.6	17.5	14.9	12.8	11.3	10.1	9.28	8.67	4.59
1.70V/cell	98.6	73.4	53.9	44.5	30.4	22.5	18.1	15.4	13.2	11.6	10.4	9.52	8.87	4.65
1.67V/cell	102.6	76.3	55.8	46.2	31.2	23.2	18.6	15.7	13.4	11.8	10.6	9.65	8.98	4.69
1.60V/cell	111.2	81.7	59.9	49.1	32.5	24.1	19.3	16.2	13.7	12.1	10.8	9.85	9.15	4.76

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

F.V/Time	20min	30min	45min	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	20h
1.85V/cell	136.1	107.5	82.6	69.4	48.9	37.4	31.1	26.9	23.2	20.6	18.6	17.1	16.2	8.62
1.80V/cell	153.8	119.0	90.2	76.2	52.7	39.9	32.8	28.2	24.3	21.5	19.5	17.9	16.9	8.97
1.75V/cell	171.0	129.5	96.6	81.1	55.7	42.1	34.3	29.2	25.1	22.2	20.1	18.4	17.2	9.14
1.70V/cell	182.2	137.7	102.2	85.5	58.7	43.7	35.3	30.0	25.9	22.9	20.6	18.9	17.6	9.25
1.67V/cell	187.5	141.2	104.9	88.0	60.0	44.9	36.1	30.5	26.3	23.2	20.9	19.1	17.8	9.33
1.60V/cell	200.9	150.1	112.1	93.0	62.1	46.5	37.3	31.4	26.8	23.6	21.2	19.5	18.1	9.45

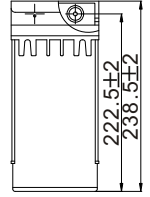
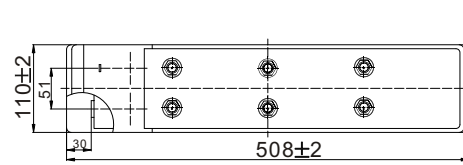
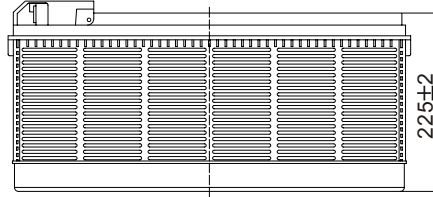
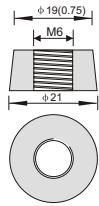
Specifications subject to change without notice.



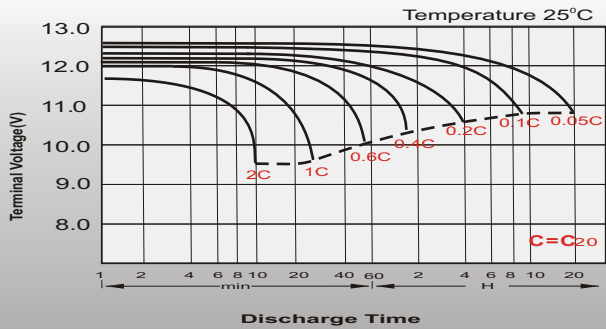
# Dimensions

## T13 Terminal

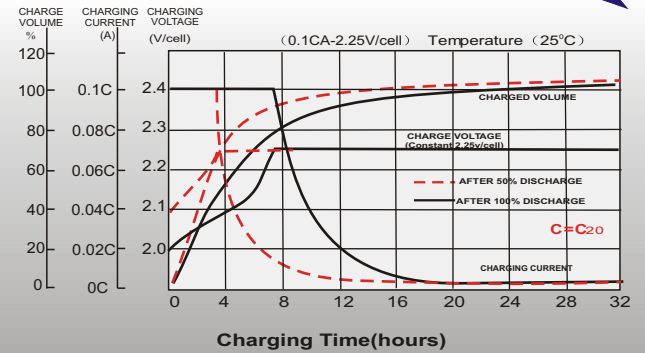
Unit: mm [inches]



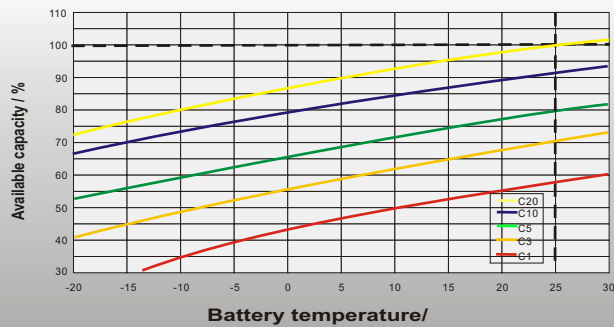
## Discharge Characteristics



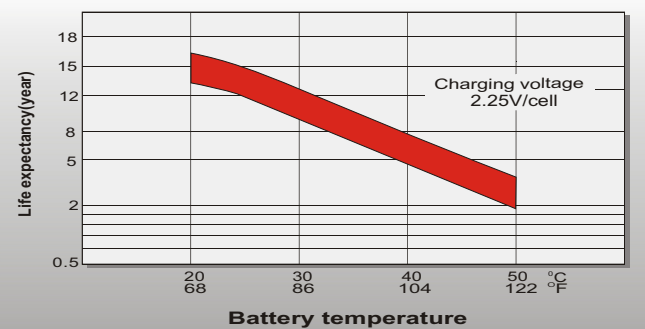
## Float Charging Characteristics



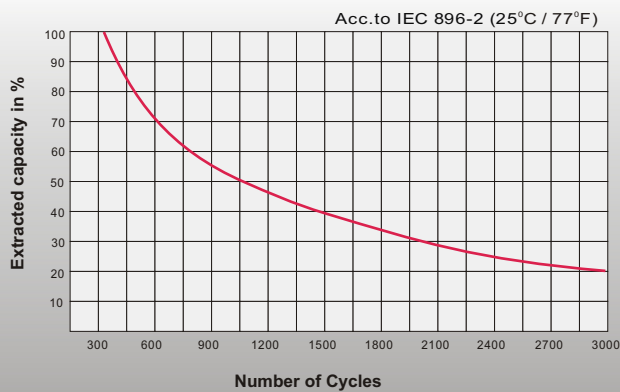
## Temperature Effects in Relation to Battery Capacity



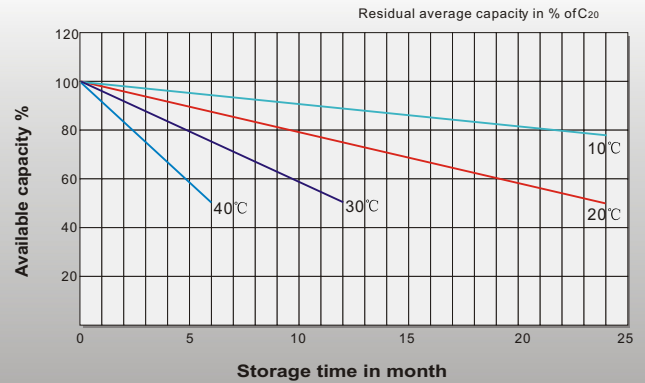
## Effect of Temperature on Long Term Float Life



## Cycle Life in Relation to Depth of Discharge



## General Relation of Capacity VS. Storage Time



## Sales Office

### China sales office:

Add: 5th Floor, Xinbaohui Bldg., Nanshan 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:

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

### Singapore sales office:

Add: No. 1 Tech Park Crescent,  
Singapore 638131  
Tel: +65 68416629  
Fax: +65 68443210  
Email: sales.sg@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