



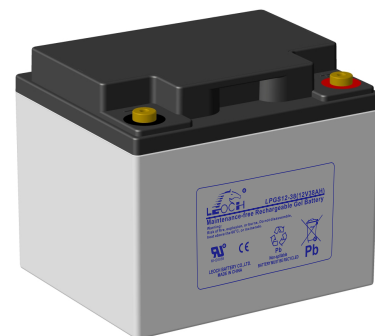
# LPGS Series-Gel Battery

## LPGS12-38(12V38Ah)

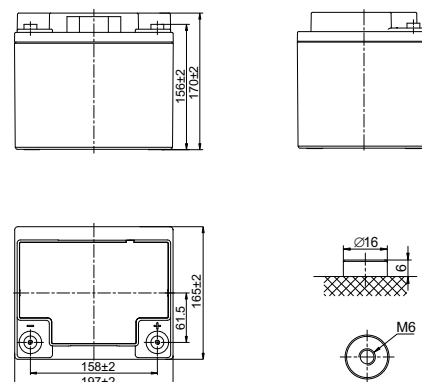


### Specifications

Rated Voltage	12V	
Nominal Capacity	38Ah	(C <sub>10</sub> , 1.80V/cell)
Dimension	Length	197±2mm (7.76 inches)
	Width	165±2mm (6.50 inches)
	Container Height	170±2mm (6.69 inches)
	Total Height	170±2mm (6.69 inches)
Approx Weight	13.3 Kg (29.3 lbs)	
Terminal	M6	
Container Material	ABS	
Rated Capacity (25°C)	39.2 Ah	(20hr, 1.96A, 1.80V/cell)
	38.0 Ah	(10hr, 3.80A, 1.80V/cell)
	32.3 Ah	(5hr, 6.46A, 1.75V/cell)
	28.1 Ah	(3hr, 9.35A, 1.75V/cell)
	21.6 Ah	(1hr, 21.6A, 1.65V/cell)
Max. Discharge Current	380A (5s)	
Internal Resistance (25°C)	Approx 10.0mΩ	
Operating Temp. Range	Discharge : -20 ~ 55°C (-4 ~ 131°F)	
	Charge : -20 ~ 40°C (-4 ~ 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 9.50A. Voltage 14.4V~15.0V at 25°C(77°F)Temp. Coefficient -30mV/°C	
Standby Use	Initial Charging Current less than 9.50A. Voltage 13.5V~13.8V at 25°C(77°F)Temp. Coefficient -20mV/°C	
Effect of temp. to Capacity	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	LPGS 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.	



### Layout



### 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	61.3	48.2	41.0	34.3	27.1	20.6	17.0	10.8	8.41	6.91	5.87	5.11	4.16	3.53	1.90
1.80V/cell	81.0	60.6	48.8	39.9	31.2	23.3	18.9	11.8	9.03	7.35	6.31	5.48	4.44	3.80	1.96
1.75V/cell	93.3	68.0	54.4	43.8	33.2	24.7	20.0	12.3	9.35	7.60	6.46	5.64	4.51	3.84	1.98
1.70V/cell	103.9	75.0	58.7	46.6	35.0	25.9	20.9	12.9	9.67	7.83	6.63	5.76	4.57	3.86	2.01
1.65V/cell	113.5	80.2	61.8	49.0	36.7	26.7	21.6	13.3	10.0	8.06	6.79	5.88	4.65	3.90	2.03
1.60V/cell	126.2	87.7	66.7	52.6	39.0	28.2	22.7	13.8	10.4	8.25	6.92	6.01	4.70	3.96	2.05

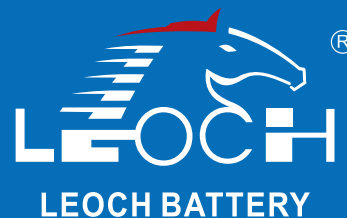
### Constant Power Discharge (Watts/cell) at 25 °C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	112.9	89.7	77.0	65.1	51.9	39.7	33.0	21.1	16.4	13.6	11.5	10.1	8.25	7.01	3.78
1.80V/cell	147.8	111.7	90.5	74.8	59.0	44.7	36.5	22.8	17.6	14.4	12.4	10.8	8.77	7.54	3.89
1.75V/cell	166.4	123.1	99.6	81.2	62.3	46.9	38.4	23.8	18.1	14.8	12.6	11.1	8.90	7.60	3.92
1.70V/cell	179.9	132.5	105.9	85.6	65.3	49.0	39.9	24.9	18.7	15.2	12.9	11.3	9.01	7.63	3.99
1.65V/cell	193.3	140.0	110.5	89.2	67.7	50.0	41.1	25.4	19.3	15.6	13.2	11.5	9.13	7.70	4.02
1.60V/cell	210.0	149.7	117.1	94.7	71.4	52.6	42.8	26.2	19.9	15.9	13.4	11.7	9.22	7.81	4.06



# LPGS Series-Gel Battery

## LPGS12-38(12V38Ah)



### Applications

- Communication power supply
- Engine starting
- Pump systems
- Alarm installations
- Marine and power stations

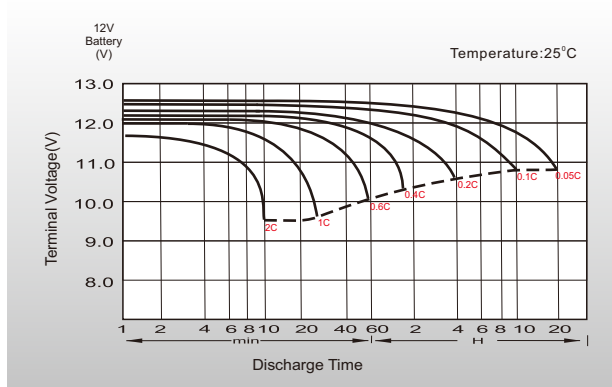
### General Features

- Adopted advantage AGM-GEL technology
- Operation temperature  $-20\sim 55^{\circ}\text{C}$
- $\leq 3\%$  Self discharge @ $25^{\circ}\text{C}$

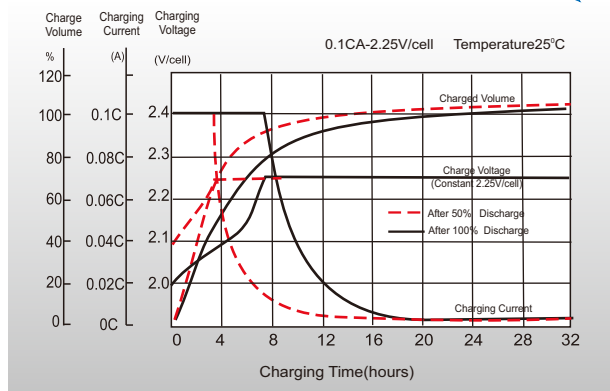
### Standards

- IEC 60896 Certified
- Classified as "Long Life" according to Eurobat
- UL Certified, CE Certified
- Manufactured in Leoch® IATF16949, ISO 9001, ISO 14001 and ISO 45001 certified production facilities

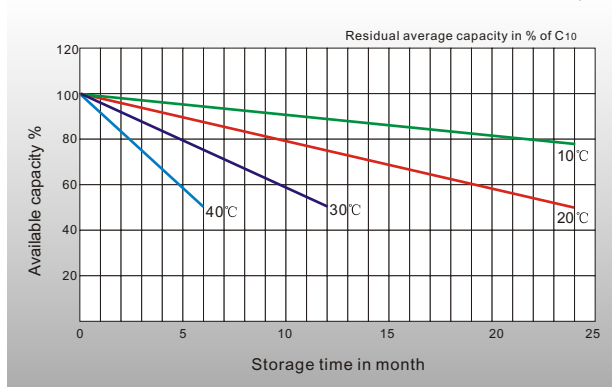
### Discharge Characteristics



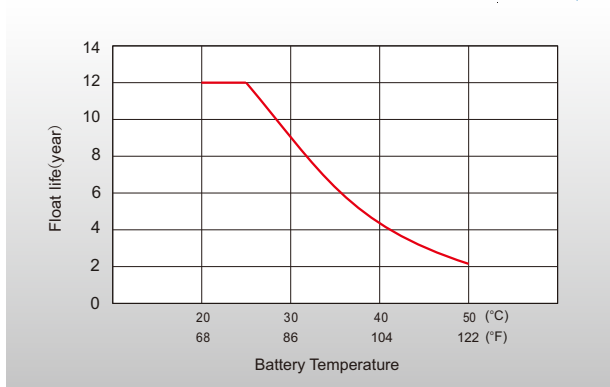
### Float Charging Characteristics



### General Relation of Capacity VS. Storage Time



### Effect of Temperature on Long Term Float Life



### Sales Offices Worldwide

#### China Sales Office

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

#### HongKong Sales Office

Workshop C, 33/F, TML Tower, No. 3 Hoi Shing Road,  
Tsuen Wan, New Territories, Hong Kong  
Tel: +852 35786666  
Fax: +44 1452 690125  
E-mail: sales.hk@leoch.com

#### Singapore Sales Office

No. 1 Tech Park Crescent,  
Singapore 638131  
Tel: +65 68636078  
Fax: +65 6863 6079  
Email: sales.sg@Leoch.com

#### Australia Sales Office

2/29 Tarlington Place, Smithfield, NSW 2164  
Australia  
Tel: 02 9756 0950  
E-mail: sales.au@leoch.com

#### North America Sales Office

19751 Descartes  
Foothill Ranch, CA 92610, USA  
Tel: 949-588-5853  
Fax: 949-588-5966  
E-mail: sales@leoch.us

#### UK Sales Office

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

#### EMEA Sales Office

1 Deligiorgi St., 121 31 Athens,  
Greece  
Tel: +30 210 5760318 (2 lines)  
E-mail: support\_EMEA@leoch.com

#### India Sales Office

Shed no. A-53(b), 2nd Stage of Peenya Industrial Area,  
Bangalore North Taluk, Bangalore-560058, India  
Tel: +91-80-23440018/23440019  
Fax: +91-80-23440017  
E-mail: indiasales@leoch.com