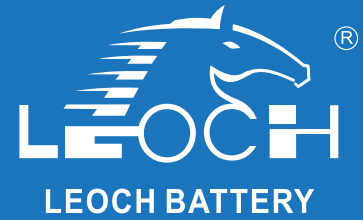




# LPCG Series-Deep Cycle Gel

## LPCG12-40(12V38Ah)

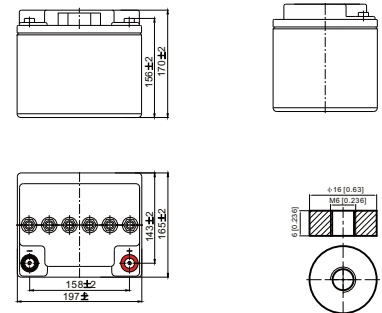


### Specifications

Rated Voltage	12V	
Nominal Capacity	38Ah	(C <sub>20</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	12.7 Kg (28.0 lbs)	
Terminal	M6	
Container Material	ABS	
Rated Capacity (25°C)	38.0 Ah	(20hr, 1.90A, 1.80V/cell)
	35.0 Ah	(10hr, 3.50A, 1.80V/cell)
	31.0Ah	(5hr, 6.20A, 1.75V/cell)
	27.7 Ah	(3hr, 9.22A, 1.75V/cell)
	21.5 Ah	(1hr, 21.5A, 1.67V/cell)
Max. Discharge Current	350A (5s)	
Internal Resistance (25°C)	Approx 14.0mΩ	
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 8,75A. Voltage 14.4V~14.7V at 25°C(77°F)Temp. Coefficient -30mV/°C	
Standby Use	Initial Charging Current less than 8,75A. 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	LPCG 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.	



### Layout



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

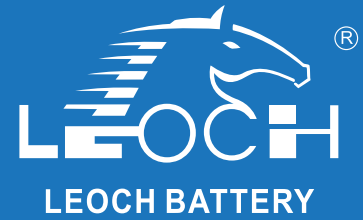
F.V/Time	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	16.5	10.2	8.08	6.56	5.71	4.99	4.05	3.43	1.77
1.80V/cell	18.2	11.2	8.87	7.13	6.01	5.28	4.22	3.50	1.90
1.75V/cell	20.4	12.0	9.22	7.35	6.20	5.45	4.29	3.61	1.91
1.67V/cell	21.5	12.5	9.51	7.48	6.37	5.54	4.36	3.64	1.95
1.60V/cell	22.2	12.8	9.63	7.61	6.51	5.63	4.40	3.68	1.98

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

F.V/Time	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	32.0	19.9	15.8	12.9	11.2	9.85	8.00	6.79	3.52
1.80V/cell	35.1	21.8	17.3	14.0	11.8	10.4	8.32	6.92	3.77
1.75V/cell	39.1	23.2	17.9	14.3	12.1	10.7	8.44	7.11	3.79
1.67V/cell	40.7	24.0	18.4	14.5	12.4	10.8	8.56	7.16	3.87
1.60V/cell	41.6	24.3	18.5	14.7	12.6	10.9	8.60	7.21	3.92

# LPCG Series-Deep Cycle Gel

## LPCG12-40(12V38Ah)



### Applications

- Electrically powered wheelchair
- Vehicle in place of walking
- Lawn-mower
- Golf trolleys and golf cart
- Railway and marine systems

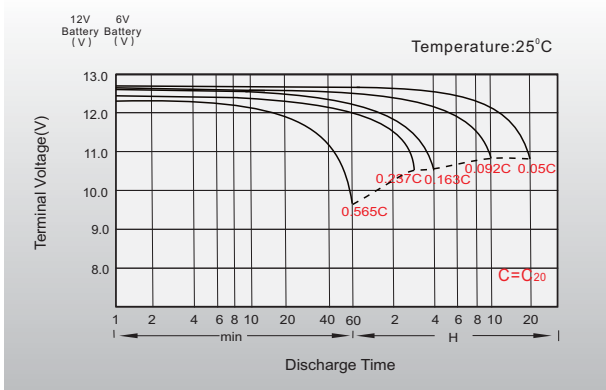
### General Features

- Special plate design, long cycle life
- $\geq 600$  Cycles @ 80%DOD
- Operation temperature  $-20 \sim 55^{\circ}\text{C}$
- $\leq 2\%$  Self discharge per month
- Good deep discharge resilience performance

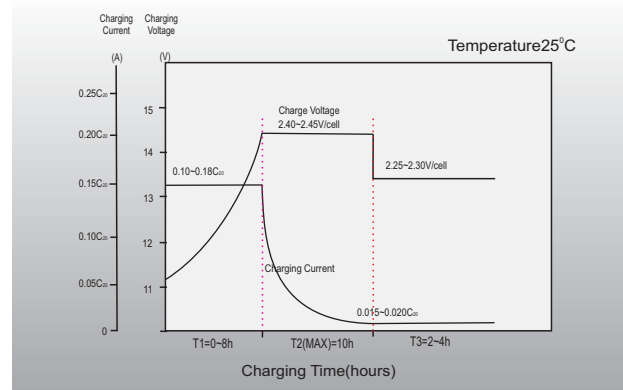
### Standards

- IEC 60896 Certified
- Classified as "Long Life" according to Eurobat
- UL Certified
- Manufactured in Leoch® IATF16949, ISO 9001, ISO 14001 and OHSAS 18001 certified production facilities

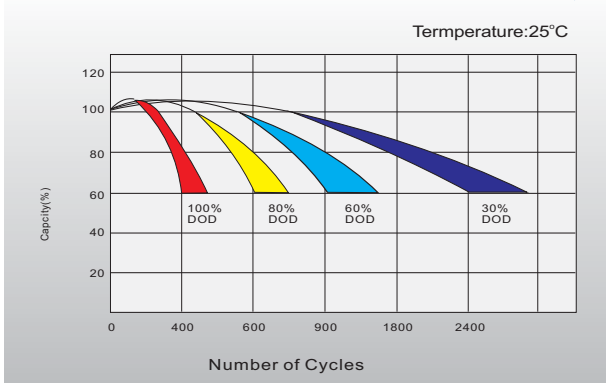
### Discharge Characteristics



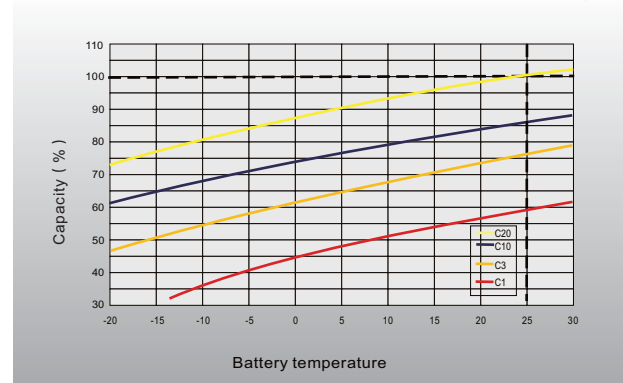
### Charging Characteristics



### Cycle Life in Relation to Depth of Discharge



### Temperature Effects in Relation to Battery Capacity



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