

# LPCG SERIES- Deep cycle GEL

## LPCG12-70H(12V70AH)

### Specification

Nominal Voltage	12V	
Nominal Capacity(20HR)	70.0AH	
Dimension	Length	260±3mm (10.24 inches)
	Width	168±2mm (6.61 inches)
	Container Height	208±3mm (8.19 inches)
	Total Height (with Terminal)	214±3mm (8.43 inches)
Approx Weight	Approx 23.0 kg (50.7lbs)	
Terminal	T6	
Container Material	ABS	
Rated Capacity	70.0 AH/3.50A	(20hr, 1.80V/cell, 25°C/77°F)
	64.6 AH/6.46A	(10hr, 1.80V/cell, 25°C/77°F)
	56.5 AH/11.3A	(5hr, 1.75V/cell, 25°C/77°F)
	49.8 AH/16.6A	(3hr, 1.75V/cell, 25°C/77°F)
	41.5AH/41.5A	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	700A (5s)	
Internal Resistance	Approx 6.4mΩ	
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 14.0A. 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	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.	



### Typical Applications

- ◆ Railway and marine systems
- ◆ Electric tools
- ◆ Vehicle in place of walking
- ◆ Lawn mowers
- ◆ Golf trolleys and golf cart
- ◆ Electric toys
- ◆ Portable power
- ◆ Wheelchairs
- ◆ Medical equipments.



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

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	77.1	66.8	60.0	47.8	36.4	30.3	19.0	14.3	11.8	10.0	8.74	7.05	6.02	3.38
1.80V/cell	92.6	77.2	68.3	53.2	40.9	33.7	20.7	15.5	12.6	10.7	9.27	7.44	6.33	3.50
1.75V/cell	107.4	87.8	76.0	57.9	43.5	35.7	21.7	16.2	13.1	11.0	9.56	7.62	6.42	3.51
1.70V/cell	119.3	95.6	81.5	61.4	45.5	37.3	22.8	16.8	13.5	11.3	9.85	7.79	6.53	3.57
1.67V/cell	127.8	100.5	84.9	63.8	47.3	38.6	23.4	17.3	13.7	11.6	10.0	7.91	6.63	3.61
1.60V/cell	139.3	107.5	90.9	67.6	50.0	40.5	24.3	17.8	14.2	11.9	10.2	8.01	6.73	3.64

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

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	144.9	126.5	114.6	91.8	70.4	59.0	37.1	28.1	23.1	19.8	17.3	14.0	12.0	6.75
1.80V/cell	171.5	143.9	128.6	101.3	78.5	65.3	40.2	30.1	24.6	21.0	18.2	14.7	12.5	6.98
1.75V/cell	195.9	161.9	141.6	109.6	83.2	68.7	42.0	31.5	25.5	21.6	18.8	15.1	12.7	7.01
1.70V/cell	214.4	174.5	150.6	115.3	86.6	71.5	44.0	32.5	26.2	22.1	19.3	15.4	12.9	7.11
1.67V/cell	227.1	181.4	155.8	119.0	89.4	73.7	44.9	33.3	26.7	22.6	19.6	15.6	13.1	7.19
1.60V/cell	243.0	191.3	165.0	124.7	93.7	76.7	46.3	34.2	27.4	23.2	20.0	15.8	13.3	7.25

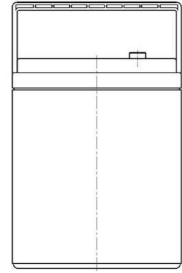
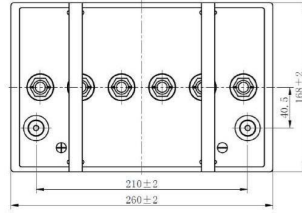
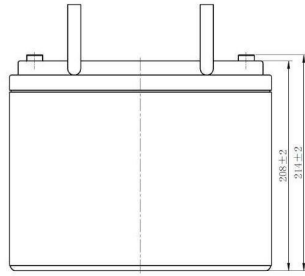
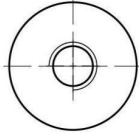
## Dimensions

### T6 Terminal

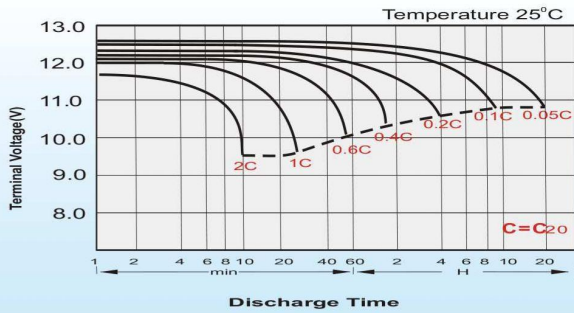
Unit: mm [inches]

φ16 [0.63]

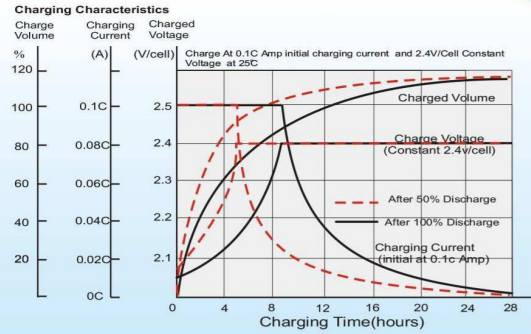
M6 [0.236]



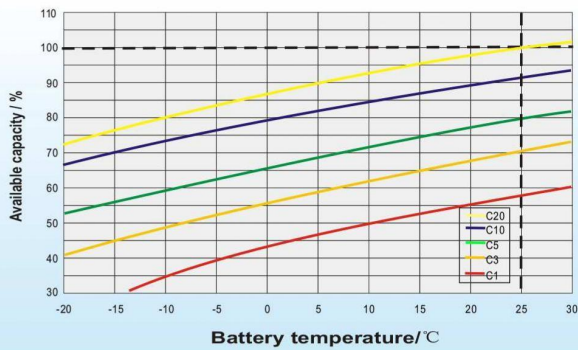
## Discharge Characteristics



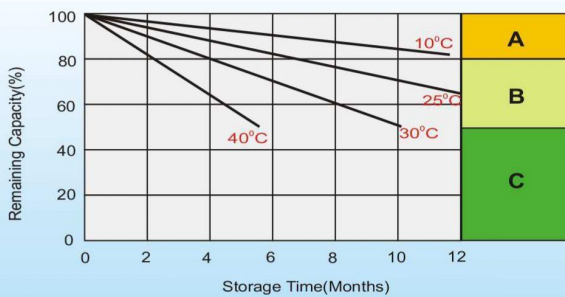
## Charging Characteristics (cycle use)



## Temperature Effects in Relation to Battery Capacity



## Cycle Life in Relation to Depth of Discharge



## 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.