

Specification

Nominal Voltage	12V	
Nominal Capacity(10HR)	42.0AH	
Dimension	Length	197±2mm (7.76 inches)
	Width	165±2mm (6.50 inches)
	Container Height	170±2mm (6.69 inches)
	Total Height (with Terminal)	170±2mm (6.69 inches)
Approx Weight	Approx 14.5 Kg (32.0 lbs)	
Terminal	T6	
Container Material	ABS	
Rated Capacity	45.0AH/2.25A	(20hr, 1.80V/cell, 25°C/77°F)
	42.0AH/4.20A	(10hr, 1.80V/cell, 25°C/77°F)
	36.85AH/7.37A	(5hr, 1.75V/cell, 25°C/77°F)
	32.85AH/10.95A	(3hr, 1.75V/cell, 25°C/77°F)
	27.1AH/27.1A	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	504A (5s)	
Internal Resistance	Approx 9.1mΩ	
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 12.6A. 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 LPC 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

- ◆ Electric tools
- ◆ Vehicle in place of walking
- ◆ Lawn mowers
- ◆ Golf trolleys and golf cart
- ◆ Portable apparatus, lights and instruments;
- ◆ Electric toys
- ◆ Illumination light
- ◆ Fire alarms
- ◆ 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	61.5	51.7	43.2	33.1	25.1	21.0	13.0	9.72	7.86	6.69	5.83	4.76	3.96	2.23
1.80V/cell	78.6	62.5	51.5	38.4	28.7	23.5	14.2	10.54	8.52	7.18	6.25	5.05	4.20	2.25
1.75V/cell	86.3	68.3	55.2	40.8	30.2	24.6	14.7	10.95	8.80	7.37	6.43	5.14	4.24	2.27
1.70V/cell	94.1	72.9	58.3	42.3	31.2	25.3	15.3	11.2	9.01	7.55	6.56	5.21	4.28	2.31
1.65V/cell	101.6	77.5	61.9	44.4	32.5	26.2	15.8	11.6	9.21	7.76	6.70	5.29	4.37	2.34
1.60V/cell	110.3	82.9	65.5	46.5	33.8	27.1	16.3	11.8	9.42	7.94	6.85	5.34	4.42	2.36

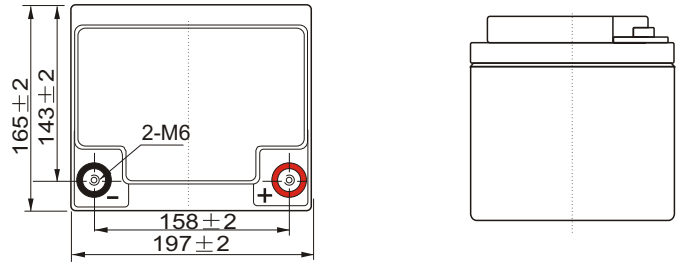
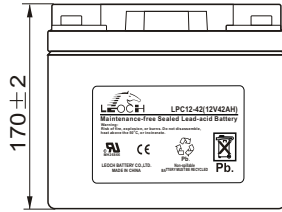
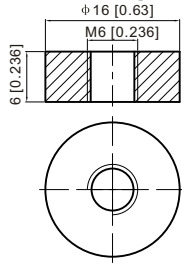
Constant Power Discharge (Watts) at 25 °C (77°F)

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	114.7	97.5	82.4	63.6	48.7	40.7	25.4	19.0	15.4	13.1	11.5	9.42	7.85	4.46
1.80V/cell	144.6	116.1	96.7	72.9	55.1	45.3	27.5	20.5	16.6	14.1	12.3	9.97	8.31	4.50
1.75V/cell	157.0	125.6	102.7	77.1	57.7	47.2	28.5	21.2	17.1	14.4	12.6	10.14	8.39	4.53
1.70V/cell	168.7	133.1	108.0	79.5	59.4	48.6	29.5	21.7	17.5	14.7	12.9	10.27	8.47	4.62
1.65V/cell	180.8	140.6	114.0	83.1	61.6	50.1	30.3	22.3	17.8	15.1	13.1	10.42	8.63	4.67
1.60V/cell	192.9	148.6	119.5	86.3	63.6	51.4	31.1	22.7	18.2	15.4	13.4	10.51	8.72	4.69

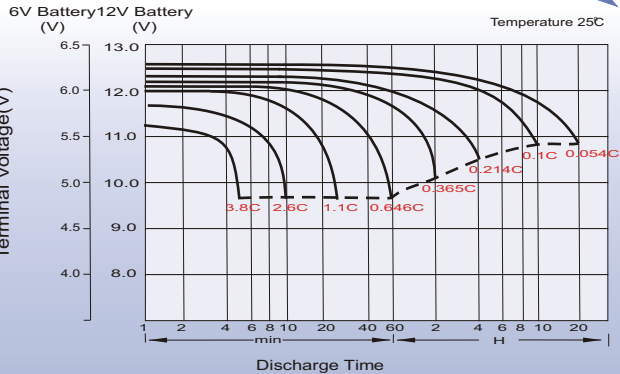
Dimensions

T6 Terminal

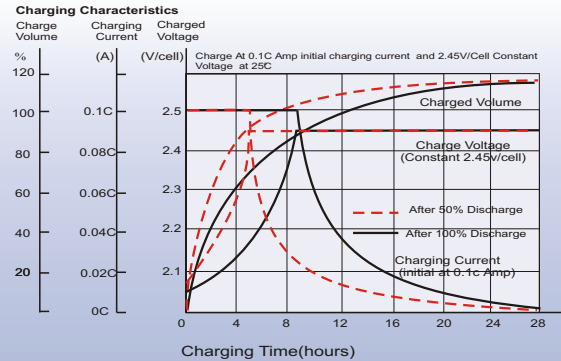
Unit: mm [inches]



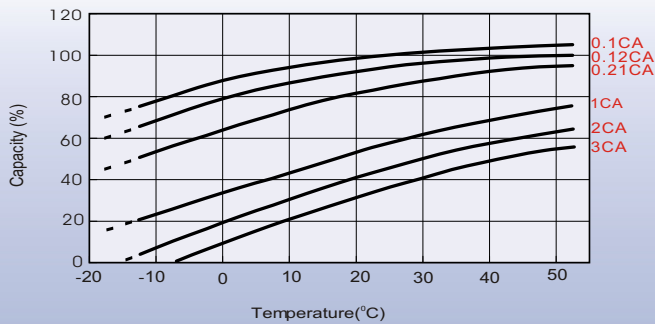
Discharge Characteristics



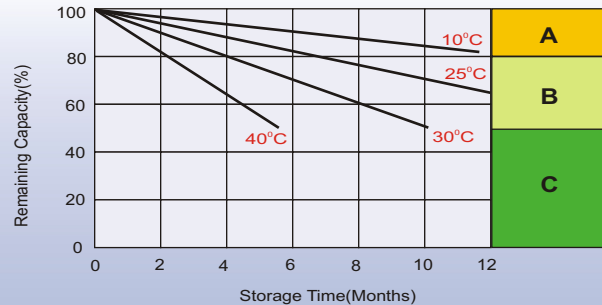
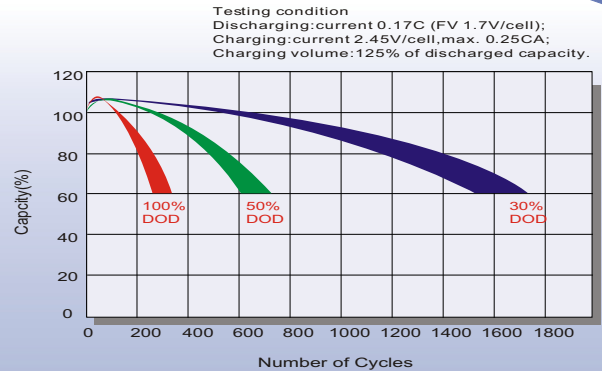
Charging Characteristics (cycle use)



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 volatge 2.25V/cell.
 2. Charged for above 20 hours at limited current 0.25CA and constant volatge 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

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