

LL SERIES-Long Life

LL12075 (12V 75 AH)

Specification

Nominal Voltage	12V	
Nominal Capacity(10HR)	75.0AH	
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 22.7Kg(50.0 lbs)	
Terminal	T6	
Container Material	ABS	
Rated Capacity	78.0 AH/3.90A	(20hr , 1.80V/cell, 25°C/77°F)
	75.0 AH/7.50A	(10hr, 1.80V/cell, 25°C/77°F)
	67.5AH/13.5A	(5hr, 1.75V/cell, 25°C/77°F)
	61.5 AH/20.5A	(3hr, 1.75V/cell, 25°C/77°F)
	47.3 AH/47.3A	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	900A (5s)	
Internal Resistance	Approx 7.5 mΩ	
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 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	LL series batteries may be stored for up to 6 months at 20°C(68°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	



Applications

- ◆ UPS and EPS
- ◆ Emergency light
- ◆ Railway signal and aircraft signal system
- ◆ Marine and power stations Alarm and security system
- ◆ Electronic apparatus and equipment
- ◆ Communication power supply, DC power supply

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	111.0	96.2	75.7	67.0	49.0	41.5	25.3	18.5	14.5	12.6	11.1	8.6	7.1	3.76
1.80V/cell	125.9	109.0	85.5	72.9	51.9	43.0	26.1	20.1	15.5	13.3	12.0	9.0	7.5	3.90
1.75V/cell	136.6	118.0	92.3	74.4	53.8	45.1	27.5	20.5	15.8	13.5	12.0	9.1	7.5	3.94
1.70V/cell	145.6	125.3	97.9	75.9	54.8	46.0	28.0	20.9	16.1	13.7	12.1	9.2	7.6	3.98
1.65V/cell	150.2	129.0	100.6	77.0	55.6	46.7	28.4	21.1	16.3	14.0	12.2	9.3	7.7	4.03
1.60V/cell	155.4	133.0	103.2	78.1	56.4	47.3	28.8	21.3	16.5	14.2	12.2	9.4	7.8	4.07

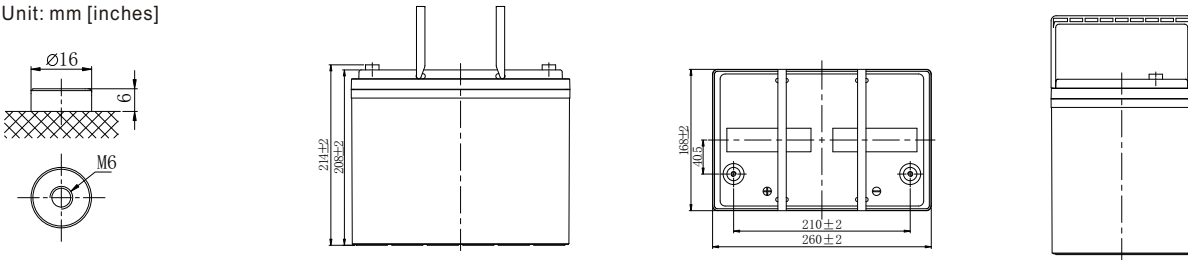
Constant Power Discharge (Watts/cell) at 25 °C (77°F)

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	208.7	182.1	143.9	128.0	94.2	80.2	49.2	36.2	28.5	24.9	22.0	17.0	14.1	7.5
1.80V/cell	233.5	203.8	161.0	138.2	99.1	82.6	50.5	39.1	30.3	26.0	23.5	17.8	14.7	7.8
1.75V/cell	249.2	217.5	171.8	140.0	102.1	86.3	53.0	39.8	30.8	26.4	23.6	17.9	14.9	7.8
1.70V/cell	262.0	228.6	180.6	141.6	103.4	87.6	53.8	40.4	31.2	26.8	23.7	18.1	15.0	7.9
1.65V/cell	266.2	232.3	183.5	142.6	104.3	88.4	54.4	40.6	31.6	27.2	23.8	18.3	15.2	8.0
1.60V/cell	270.0	235.6	186.1	143.2	104.8	89.0	54.8	40.8	31.8	27.5	23.7	18.5	15.3	8.1

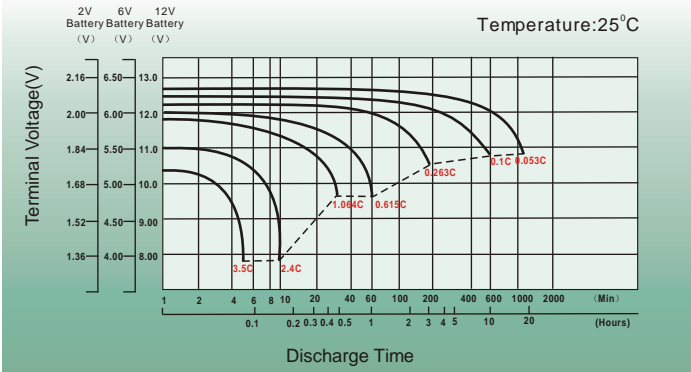
Dimensions

T6 Terminal

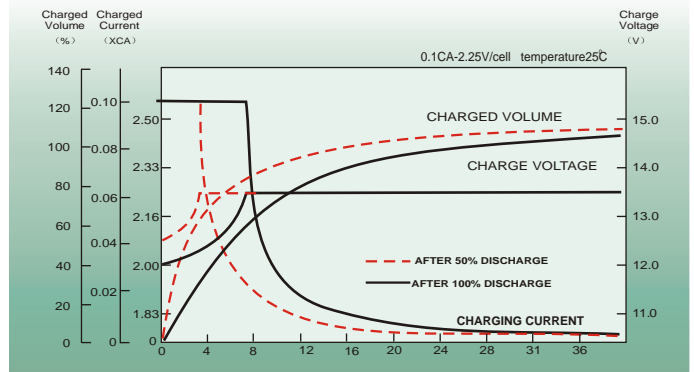
Unit: mm [inches]



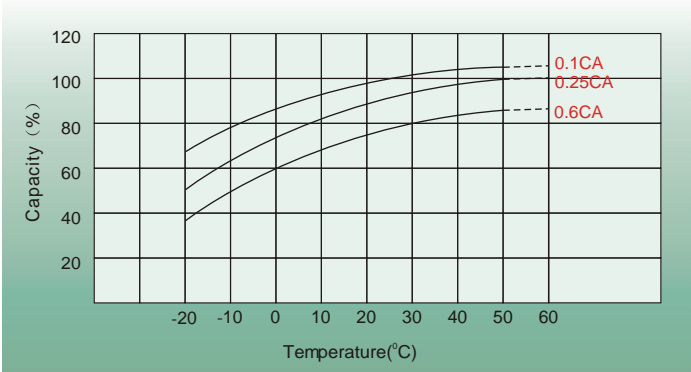
Discharge Characteristics



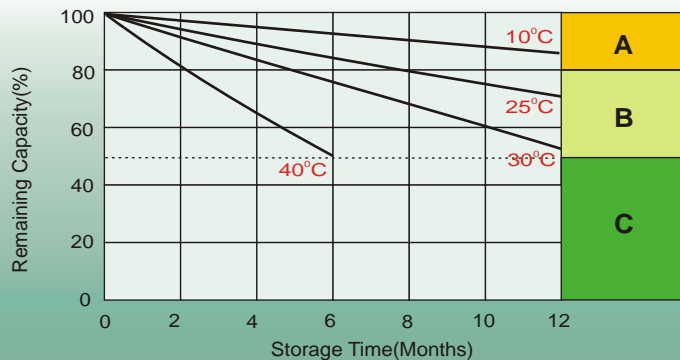
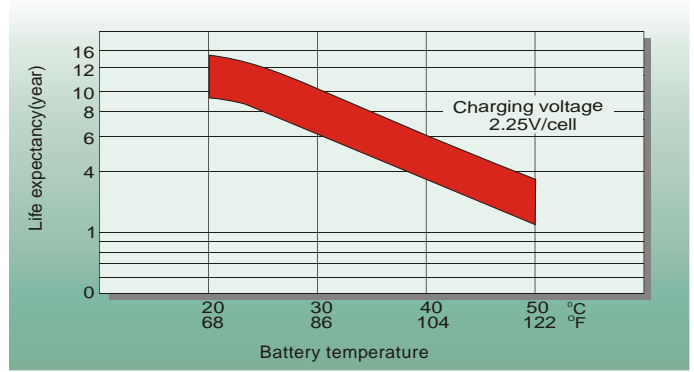
Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life



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.