

# LL SERIES-Long Life

## LL12026 (12V26AH)

### Specification

Nominal Voltage	12V	
Nominal Capacity(20HR)	26.0AH	
Dimension	Length	166±2mm (6.54 inches)
	Width	175±2mm (6.93 inches)
	Container Height	125±2mm (4.92 inches)
	Total Height (with Terminal)	125±2mm (4.92 inches)
Approx Weight	Approx 8.4 Kg (18.5 lbs)	
Terminal	T12	
Container Material	ABS	
Rated Capacity	25.8AH/1.290A	(20hr, 1.80V/cell, 25°C/77°F)
	25.5AH/2.55A	(10hr, 1.80V/cell, 25°C/77°F)
	23.8AH/4.77A	(5hr, 1.75V/cell, 25°C/77°F)
	21.3AH/7.01A	(3hr, 1.75V/cell, 25°C/77°F)
	17.4AH/17.4A	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	390A (5s)	
Internal Resistance	Approx 14.0mΩ	
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 7.8A. 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) emp. 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 powerstations
- ◆ 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	46.8	39.3	33.2	25.0	19.2	16.0	9.10	6.80	5.46	4.65	3.97	3.12	2.52	1.27
1.80V/cell	49.2	40.8	34.2	25.6	19.5	16.3	9.24	6.91	5.53	4.71	4.02	3.16	2.55	1.29
1.75V/cell	51.6	42.3	35.3	26.2	19.9	16.5	9.39	7.01	5.61	4.77	4.07	3.20	2.58	1.30
1.70V/cell	54.0	43.8	36.3	26.8	20.3	16.8	9.53	7.11	5.69	4.83	4.13	3.24	2.61	1.31
1.65V/cell	55.4	44.7	36.9	27.2	20.5	17.0	9.62	7.17	5.73	4.87	4.16	3.26	2.63	1.32
1.60V/cell	58.8	46.7	38.4	28.0	21.1	17.4	9.82	7.31	5.84	4.96	4.23	3.31	2.67	1.34

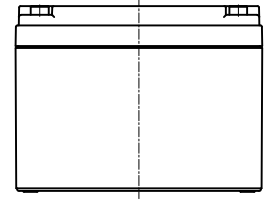
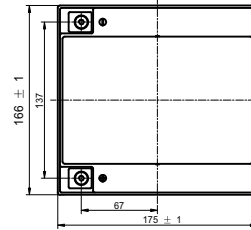
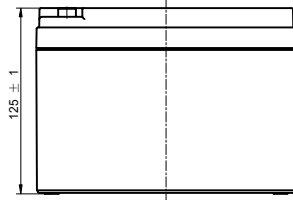
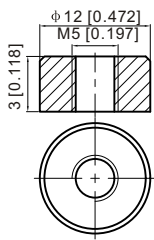
### Constant Power Discharge (Watts/cell) at 25 °C (77°F)

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	89.5	75.4	63.9	48.3	37.2	31.0	17.80	13.40	10.80	9.18	7.85	6.19	5.00	2.55
1.80V/cell	93.6	78.0	65.6	49.3	37.8	31.5	18.00	13.50	10.90	9.29	7.95	6.26	5.06	2.57
1.75V/cell	97.6	80.4	67.2	50.3	38.4	32.0	18.30	13.70	11.00	9.40	8.03	6.33	5.12	2.60
1.70V/cell	101.6	82.8	68.9	51.2	39.0	32.4	18.50	13.90	11.10	9.50	8.13	6.40	5.18	2.63
1.65V/cell	104.0	84.3	69.9	51.8	39.3	32.7	18.70	14.00	11.20	9.57	8.18	6.44	5.21	2.64
1.60V/cell	109.4	87.5	72.1	53.0	40.1	33.3	19.00	14.20	11.40	9.72	8.31	6.54	5.29	2.68

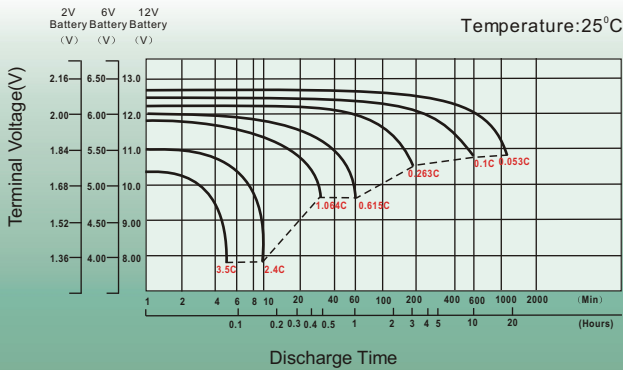
## Dimensions

### T12 Terminal

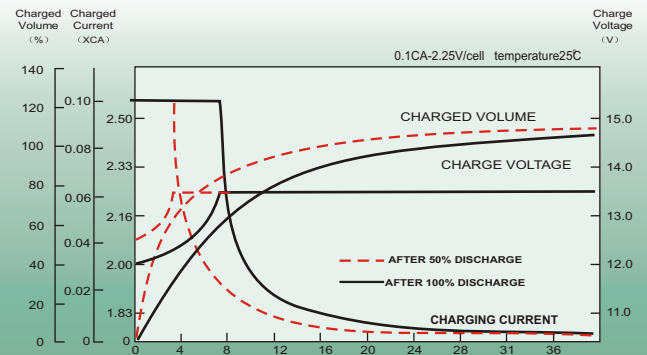
Unit: mm [inches]



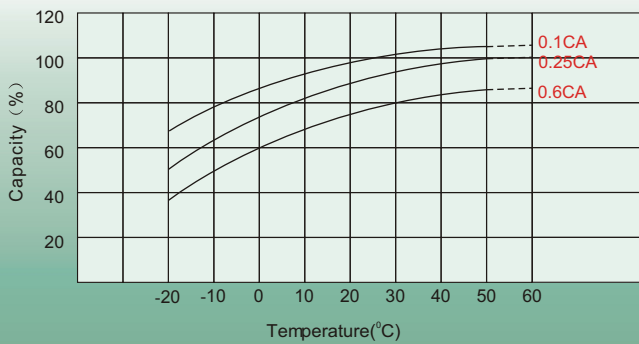
## Discharge Characteristics



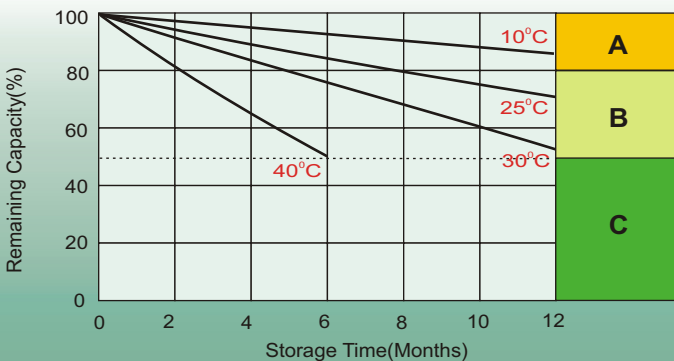
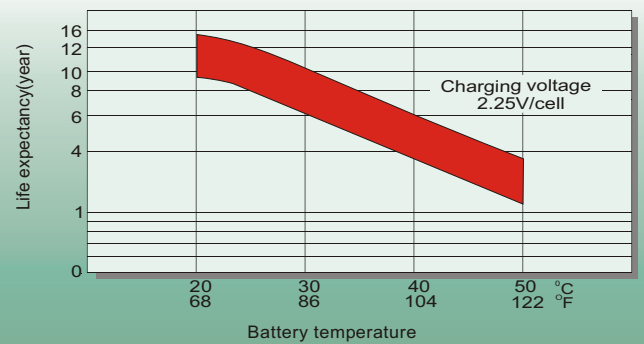
## Float Charging Characteristics



## 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 volatge 2.25V/cell.
  2. Charged for above 20hours at limited current 0.25CA and constant volatge 2.45V/cell.
  3. Charged for 8-10hours 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.