

### ⚡ Specifications

#### Nominal Voltage(V)

12V

#### Nominal Capacity

20 hour rate	(0.7A	to	10.50V)	14Ah
10 hour rate	(1.33A	to	10.50V)	13.3Ah
5 hour rate	(2.38A	to	10.20V)	11.9Ah
1 C	(14A	to	9.60V)	7.93Ah
3 C	(42A	to	9.60V)	5.6Ah

#### Weight

Approx. 4.4kg(9.68Lbs.)

#### Internal Resistance (at 1KHz)

Approx. 10 mΩ

#### Maximum Discharge Current for

5 seconds: 210A

#### Charging Methods at 25°C(77°F)

Cycle use:	
Charging Voltage	14.4 to 15.0V
Coefficient -5.0mV/°C/cell	
Maximum Charging Current :	4.2A
Standby use:	
Float Charging Voltage	13.5 to 13.8V
Coefficient -3.0mV/°C/cell	

#### Operating Temperature Range

Charge	-15°C(5°F)	to	40°C(104°F)
Discharge	-15°C(5°F)	to	50°C(122°F)
Storage	-15°C(5°F)	to	40°C(104°F)

#### Charge Retention (shelf life) at 20°C(68°F)

1 month	92%
3 month	90%
6 month	80%

#### Case Material

ABS UL94 HB  
Option: Flammability resistance of (UL94 V-0)

#### Design Life

3-5 Years.

#### Terminal

F6



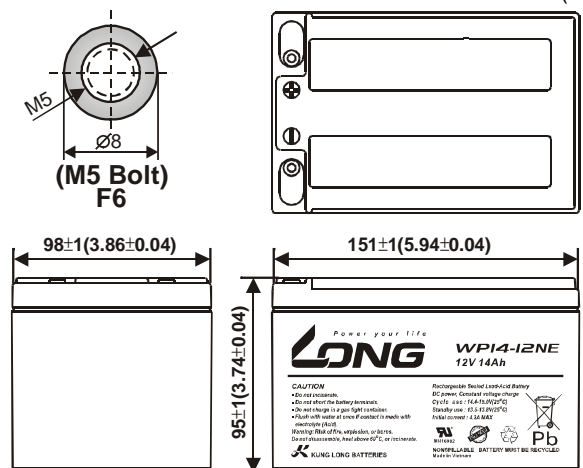
### ⚡ Dimensions

Length (L)	151±1 (5.94±0.04)
Width (W)	98±1 (3.86±0.04)
Height (H)	95±1 (3.74±0.04)
Overall Height (HT)	95±1 (3.74±0.04)

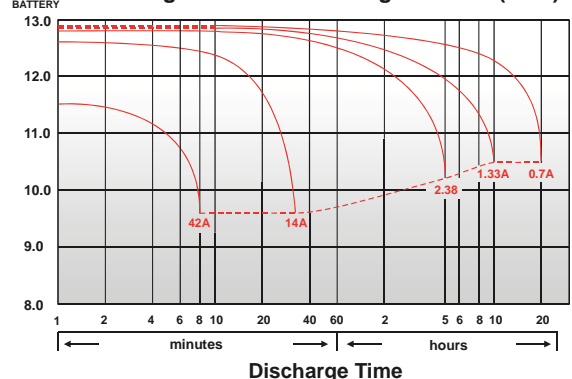
#### Description of torque value of hard ware for the terminals:

Recommended torque value	M6: 7 N-m (71kgf-cm)
Maximum allowable torque value	M6: 9 N-m (92kgf-cm)

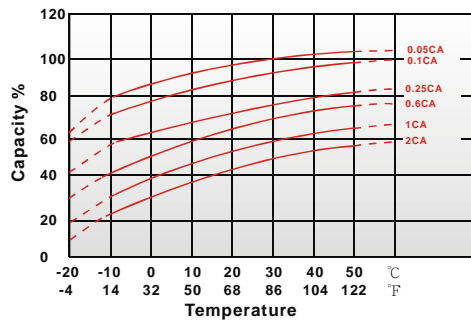
mm(inch)



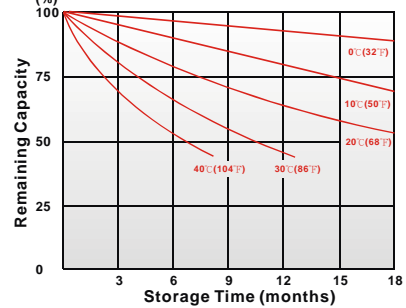
(V) Discharge Time VS. Discharge Current (25°C)  
FOR 12V BATTERY



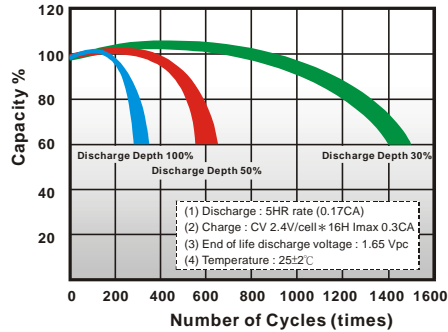
Effect of Temperature on Capacity 25°C(77°F)



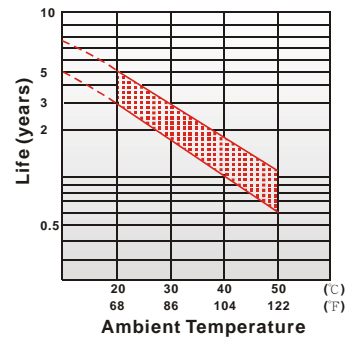
Capacity Retention Characteristic



Cycle Service Life



Trickle (or float) Service Life



**- PERFORMANCE DATA**

Discharge Rates in Watts to Various End Voltages at 25°C(77°F)

End Voltage		1.85V	1.80V	1.75V	1.70V	1.67V	1.65V	1.60V
Time								
5	min	74.8	85.2	92.3	98.8	101	104	106
10	min	52.2	58.7	64.0	68.0	70.1	71.4	72.7
15	min	39.5	43.0	46.2	48.3	49.2	50.5	51.2
30	min	25.7	27.5	28.6	29.5	29.9	30.1	30.6
60	min	17.0	17.9	18.5	19.0	19.2	19.4	19.5
120	min	9.58	10.1	10.3	10.5	10.6	10.6	10.7
180	min	6.85	7.07	7.22	7.35	7.40	7.44	7.54
240	min	5.37	5.52	5.63	5.73	5.77	5.81	5.88
300	min	4.58	4.70	4.78	4.85	4.89	4.92	4.94
600	min	2.56	2.66	2.72	2.77	2.79	2.80	2.82
1200	min	1.39	1.41	1.43	1.45	1.46	1.46	1.47

**- Discharge Rates in Amperes to Various End Voltages at 25°C(77°F)**

End Voltage		1.85V	1.80V	1.75V	1.70V	1.67V	1.65V	1.60V
Time								
5	min	44.5	49.9	53.9	58.0	60.4	62.9	65.2
10	min	31.5	33.7	35.8	37.9	38.8	39.9	40.8
15	min	22.9	24.4	25.5	26.8	27.3	28.2	28.6
30	min	13.6	14.2	14.8	15.3	15.6	15.8	16.1
60	min	8.67	9.09	9.42	9.69	9.83	9.92	10.0
120	min	4.60	4.81	4.92	5.04	5.07	5.13	5.35
180	min	3.38	3.47	3.54	3.60	3.62	3.66	3.72
240	min	2.61	2.66	2.73	2.79	2.81	2.85	2.90
300	min	2.27	2.32	2.35	2.38	2.39	2.41	2.43
600	min	1.21	1.27	1.32	1.35	1.36	1.37	1.38
1200	min	0.664	0.692	0.705	0.710	0.712	0.715	0.718

All data on the spec. sheet is an average value:

The tolerance range : X<6min(+15%~-15%), 6min ≤ X < 60min(+12%~-12%), 10min ≤ X < 60min(+8%~-8%), X ≥ 60min(+5%~-5%)

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