

### ⚡ Specifications

#### Nominal Voltage(V)

12V

#### Nominal Capacity

20 hour rate	(0.6A to 10.50V)	12Ah
10 hour rate	(1.14A to 10.50V)	11.4Ah
5 hour rate	(2.04A to 10.20V)	10.2Ah
1 C	(12A to 9.60V)	6.8Ah
3 C	(36A to 9.60V)	4.8Ah

#### Weight

Approx. 4.02kg(8.84Lbs.)

#### Internal Resistance (at 1KHz)

Approx. 11 mΩ

#### Maximum Discharge Current for

5 seconds: 180A

#### Charging Methods at 25°C(77°F)

Cycle use:	
Charging Voltage	14.4 to 15.0V
Coefficient	-5.0mV/°C/cell
Maximum Charging Current :	3.6A
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	97%
3 month	92%
6 month	85%

#### Case Material

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

#### Terminal

F6



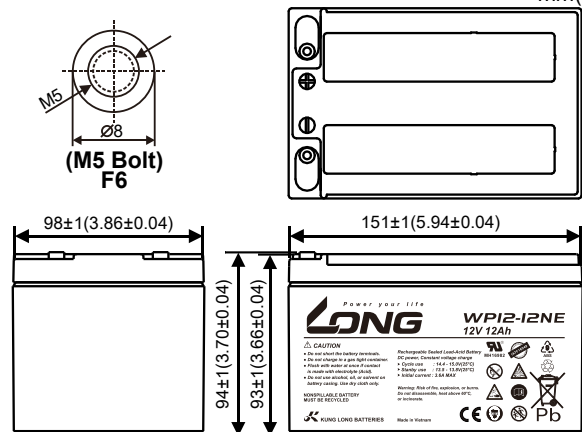
### ⚡ Dimensions

Length (L)	151±1 (5.94±0.04)
Width (W)	98±1 (3.86±0.04)
Height (H)	93±1 (3.66±0.04)
Overall Height (HT)	94±1 (3.70±0.04)

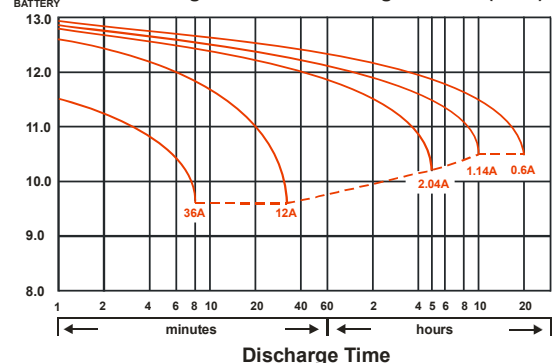
#### Description of torque value of hardware for the terminals:

Recommended torque value	M5: 4 N-m (41kgf-cm)
Maximum allowable torque value	M5: 6 N-m (61kgf-cm)

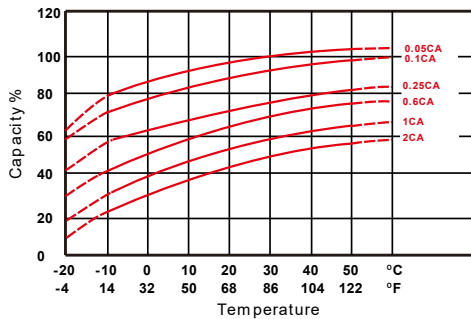
mm(inch)



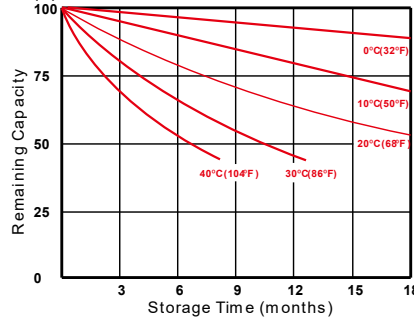
(V) FOR 12V BATTERY Discharge Time VS. Discharge Current (25°C)



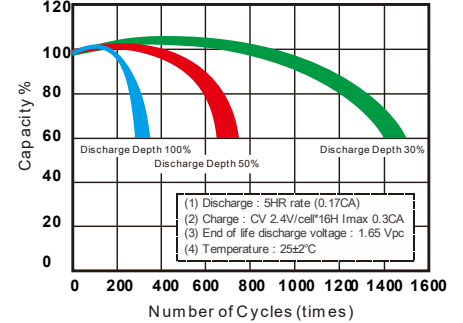
**Effect of Temperature on Capacity 25°C(77°F)**



**Capacity Retention Characteristic**



**Cycle 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	77.2	84.2	89.3	94.8	97.3	99.7	105
10	min	56.5	60.3	63.0	65.3	66.2	67.5	68.8
15	min	42.2	45.3	47.2	48.5	49.2	49.8	51.0
30	min	26.7	28.0	29.0	30.0	30.3	30.7	31.2
60	min	14.9	15.9	16.6	17.2	17.3	17.5	17.7
120	min	7.80	8.60	9.02	9.22	9.28	9.38	9.52
180	min	5.40	6.15	6.53	6.68	6.97	7.10	7.20
240	min	4.43	4.97	5.22	5.37	5.43	5.52	5.62
300	min	4.12	4.35	4.51	4.65	4.72	4.77	4.83
600	min	2.43	2.55	2.62	2.66	2.68	2.70	2.72
1200	min	1.29	1.31	1.35	1.37	1.39	1.40	1.43

**- 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	37.8	41.8	44.6	47.5	48.8	50.1	52.7
10	min	28.1	30.3	31.5	32.7	33.2	33.8	34.6
15	min	21.3	22.6	23.7	24.6	25.0	25.4	26.1
30	min	12.6	13.5	14.1	14.6	14.8	15.0	15.3
60	min	8.55	8.74	8.86	8.97	9.02	9.08	9.16
120	min	4.71	4.84	4.95	5.04	5.08	5.13	5.18
180	min	3.14	3.33	3.40	3.46	3.49	3.52	3.56
240	min	2.15	2.26	2.35	2.42	2.45	2.49	2.74
300	min	1.98	2.06	2.12	2.18	2.20	2.23	2.27
600	min	1.19	1.22	1.24	1.26	1.27	1.28	1.29
1200	min	0.619	0.626	0.645	0.654	0.661	0.669	0.683

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

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

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