

### ⚡ Specifications

#### Nominal Voltage(V)

12V

#### Nominal Capacity

10 hour rate	(15A to 10.50V)	150Ah
5 hour rate	(25.5A to 10.20V)	127.5Ah
1 hour rate	(82.5A to 9.60V)	82.5Ah
1 C	(150A to 9.60V)	80Ah

#### Weight

Approx. 45.8kg(101Lbs.)

#### Internal Resistance (at 1KHz)

Approx. 4.7 mΩ

#### Maximum Discharge Current for

5 seconds: 1500A

#### Charging Methods at 25°C(77°F)

Cycle use:	
Charging Voltage	13.8 to 14.4V
Coefficient -5.0mV/°C/cell	
Maximum Charging Current :	45A
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	98%
3 month	94%
6 month	85%

#### Case Material

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

#### Design Life

12 Years.

#### Terminal

F18

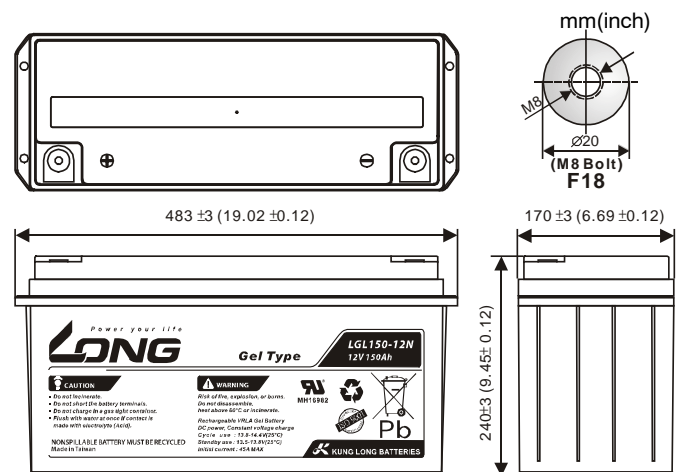


### ⚡ Dimensions

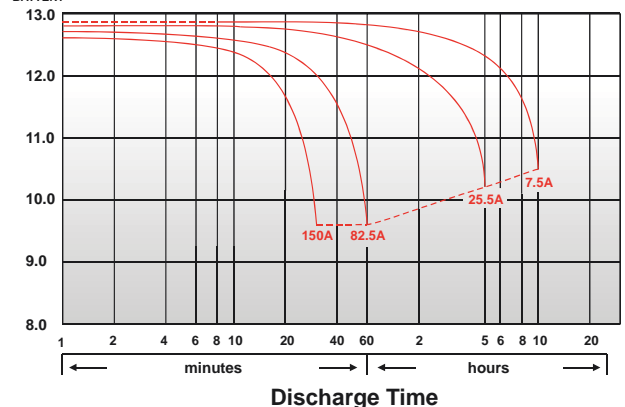
Length (L)	483±3 (19.02±0.12)
Width (W)	170±3 (6.69±0.12)
Height (H)	240±3 (9.45±0.12)
Overall Height (HT)	240±3 (9.45±0.12)

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

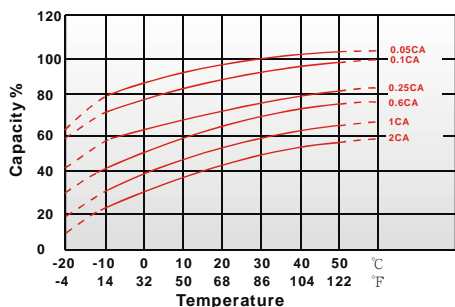
Recommended torque value	M8:12 N-m (122kgf-cm)
Maximum allowable torque value	M8:20 N-m (204kgf-cm)



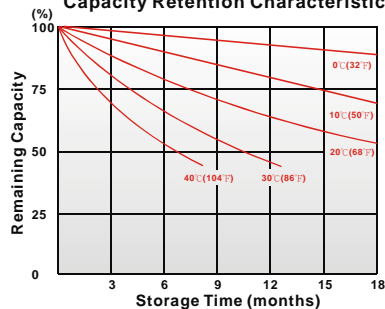
#### (V) FOR 12V BATTERY Discharge Time VS. Discharge Current (25°C)



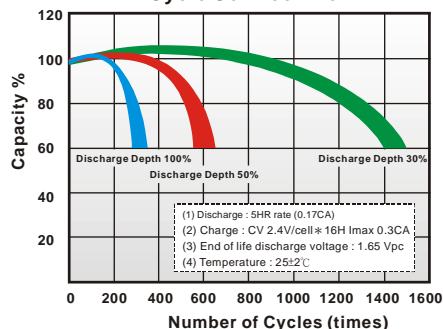
Effect of Temperature on Capacity 25°C (77°F)



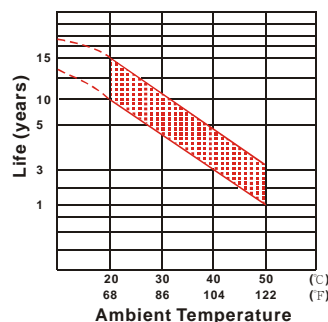
Capacity Retention Characteristic



Cycle Service Life



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
5	min	497	587	680	727	777	803	810
10	min	407	464	520	547	576	591	601
15	min	349	389	427	445	464	474	485
20	min	313	344	372	385	399	407	418
30	min	249	268	284	292	300	304	314
60	min	156	162	165	167	169	170	178
90	min	128	135	137	138	139	139	141
120	min	103	108	110	111	112	112	113
180	min	72.8	76.1	77.3	78.1	78.4	78.7	79.5
240	min	56.9	59.5	60.3	60.9	61.3	61.4	61.9
300	min	45.9	47.8	48.6	49.1	49.2	49.4	49.9
480	min	31.2	32.5	32.9	33.3	33.4	33.6	33.7
600	min	29.0	30.0	30.4	30.7	30.9	30.9	31.2
1200	min	14.5	14.9	15.1	15.3	15.4	15.4	15.4

**- 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
5	min	278	329	381	407	436	450	455
10	min	222	253	283	299	314	322	328
15	min	190	212	233	243	253	259	265
20	min	163	179	194	201	209	212	218
30	min	129	139	147	151	155	157	163
60	min	78.5	81.5	83.3	84.3	85.3	85.9	89.5
90	min	64.2	67.8	68.8	69.5	69.7	69.9	70.9
120	min	51.7	54.4	55.2	55.8	56.0	56.2	56.8
180	min	36.4	38.1	38.7	39.1	39.2	39.4	39.8
240	min	28.3	29.6	30.1	30.4	30.5	30.6	30.8
300	min	22.9	23.8	24.2	24.4	24.6	24.6	24.8
480	min	15.5	16.2	16.3	16.5	16.6	16.6	16.7
600	min	14.4	14.9	15.0	15.2	15.2	15.3	15.4
1200	min	7.19	7.38	7.50	7.58	7.63	7.64	7.66

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

The tolerance range :  $X < 6\text{min}$  (+15%~-15%),  $6\text{min} \leq X < 10\text{min}$  (+12%~-12%),  $10\text{min} \leq X < 60\text{min}$  (+8%~-8%),  $X \geq 60\text{min}$  (+5%~-5%)

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