

### ⚡ Specifications

#### Nominal Voltage(V)

12V

#### Nominal Capacity

10	hour rate	(10A	to	10.50V)	100Ah
5	hour rate	(17A	to	10.20V)	85Ah
1	hour rate	(55A	to	9.60V)	55Ah
1	C	(100A	to	9.60V)	53.33Ah

#### Weight

Approx. 34kg(74.8lbs.)

#### Internal Resistance (at 1KHz)

Approx. 4 mΩ

#### Maximum Discharge Current for

5 seconds: 1200A

#### Charging Methods at 25°C(77°F)

Cycle use:	
Charging Voltage	13.8 to 14.4V
Coefficient	-5.0mV/°C/cell
Maximum Charging Current :	30A
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

F8

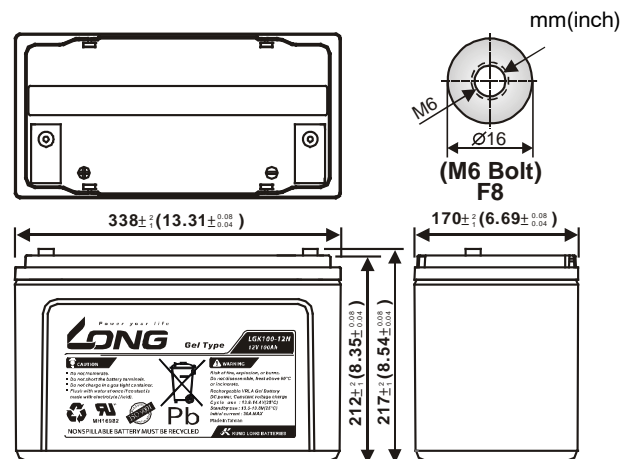


### ⚡ Dimensions

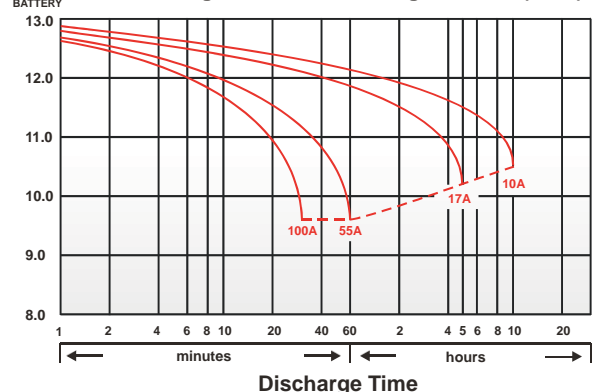
Length (L)	338± <sup>2</sup> <sub>1</sub> (13.31± <sup>0.08</sup> <sub>0.04</sub> )
Width (W)	170± <sup>2</sup> <sub>1</sub> (6.69± <sup>0.08</sup> <sub>0.04</sub> )
Height (H)	212± <sup>2</sup> <sub>1</sub> (8.35± <sup>0.08</sup> <sub>0.04</sub> )
Overall Height (HT)	217± <sup>2</sup> <sub>1</sub> (8.54± <sup>0.08</sup> <sub>0.04</sub> )

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

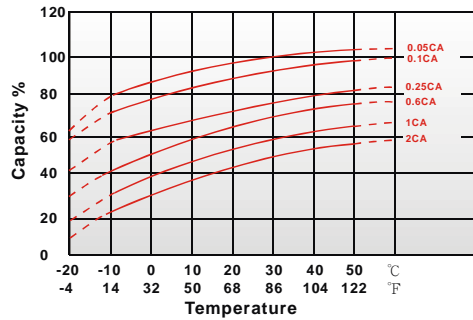
Recommended torque value	M6: 7 N-m (71kgf-cm)
Maximum allowable torque value	M6: 10 N-m (102kgf-cm)



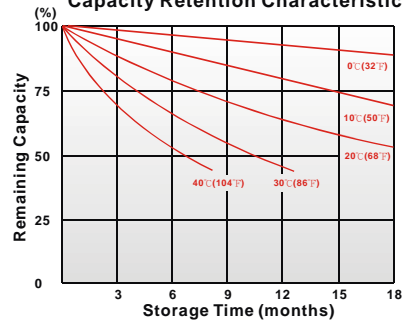
(V) FOR 12V BATTERY Discharge Time VS. Discharge Current (25°C)



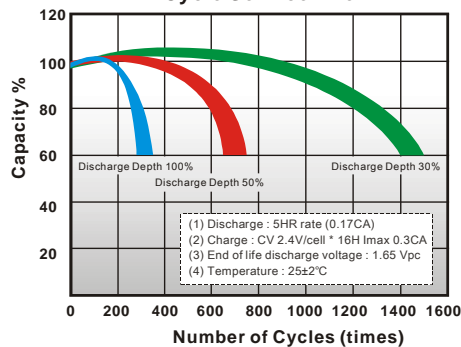
Effect of Temperature on Capacity 25°C (77°F)



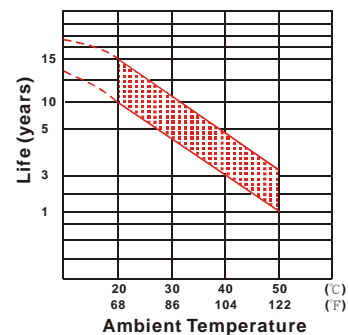
Capacity Retention Characteristic



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
Time								
5	min	460	508	541	573	587	603	632
10	min	310	339	363	385	395	406	426
15	min	244	266	283	299	306	314	328
30	min	144	153	162	169	172	176	183
60	min	108	112	115	117	118	120	121
120	min	58.6	61.5	63.9	65.3	66.2	67.3	68.7
180	min	45.4	47.7	49.8	50.1	50.8	51.8	52.9
240	min	32.9	34.9	36.7	38.6	39.2	40.0	40.9
300	min	30.6	32.0	33.3	34.2	34.5	35.0	35.6
600	min	18.2	19.3	20.1	20.9	21.2	21.5	21.9
1200	min	10.0	10.4	10.6	10.8	10.9	11.0	11.1

#### - 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	188	247	281	309	318	329	344
10	min	141	167	186	202	209	217	230
15	min	104	129	146	158	163	168	176
30	min	78.1	88.7	95.2	100	101	103	105
60	min	40.2	47.8	53.1	56.9	57.8	59.1	60.9
120	min	22.4	26.2	29.2	32.1	32.8	33.7	34.8
180	min	19.3	21.5	23.2	24.6	25.0	25.6	26.3
240	min	15.4	17.1	18.3	19.2	19.4	19.8	20.3
300	min	14.5	15.7	16.5	17.0	17.2	17.4	17.7
600	min	9.60	9.88	10.1	10.3	10.4	10.5	10.7
1200	min	4.83	4.99	5.15	5.26	5.31	5.37	5.44

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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