

⚡ Specifications

Nominal Voltage(V)

12V

Nominal Capacity

20 hour rate	(2.75A to 10.50V)	55Ah
5 hour rate	(9.35A to 10.20V)	46.75Ah
1 hour rate	(30.25A to 9.60V)	30.25Ah
1 C	(55A to 9.60V)	29.33Ah

Weight

Approx. 17.0kg(37.4Lbs.)

Internal Resistance (at 1KHz)

Approx. 8 mΩ

Maximum Discharge Current for

5 seconds:660A

Charging Methods at 25°C(77°F)

Cycle use:	
Charging Voltage	13.8 to 14.4V
Coefficient	-5.0mV/°C/cell
Maximum Charging Current :	16.5A
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

7-10 Years.

Terminal

F8



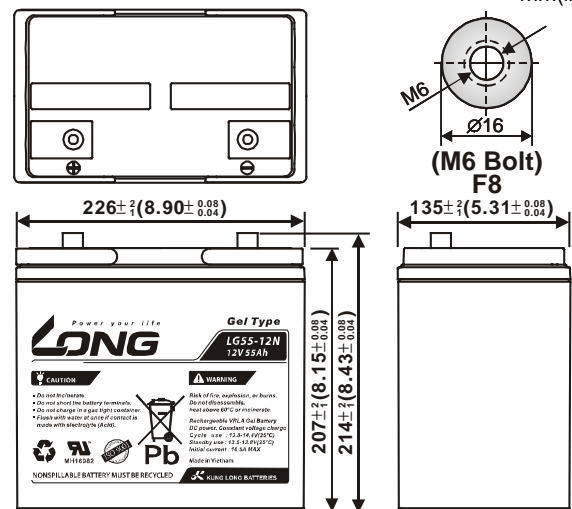
⚡ Dimensions

Length (L)	226±2-1 (8.90±0.08-0.04)
Width (W)	135±2-1 (5.31±0.08-0.04)
Height (H)	207±2-1 (8.15±0.08-0.04)
Overall Height (HT)	214±2-1 (8.43±0.08-0.04)

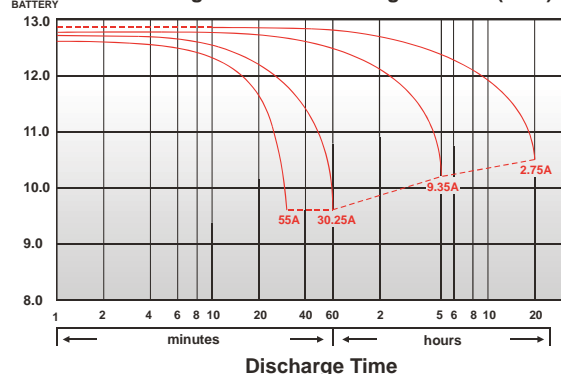
Description of torque value of hard ware for the terminals:

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

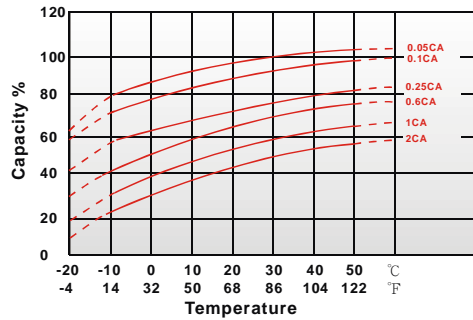
mm(inch)



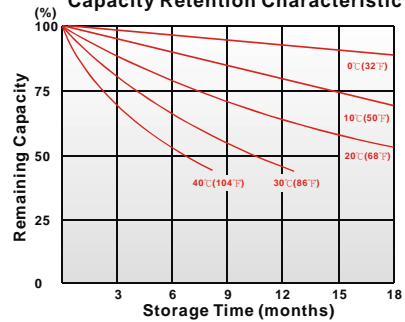
(V) FOR 12V BATTERY Discharge Time VS. Discharge Current (25°C)



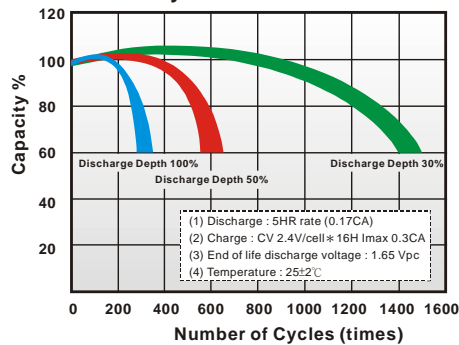
Effect of Temperature on Capacity 25°C (77°F)



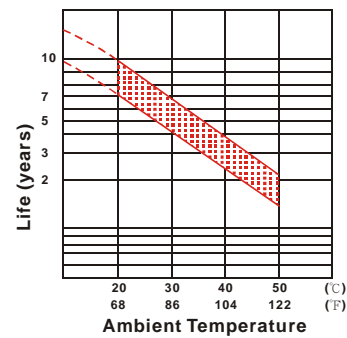
Capacity Retention Characteristic



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	302	350	380	396	399	403	408
10	min	198	230	249	259	262	264	268
15	min	154	173	186	196	198	200	202
30	min	83.0	94.5	102	105	106	107	109
60	min	57.1	60.6	63.1	65.0	65.8	66.5	67.6
120	min	30.3	33.5	35.7	37.2	37.7	38.4	39.1
180	min	22.3	24.5	26.3	27.7	28.2	28.7	29.4
240	min	18.3	20.2	21.5	22.7	23.0	23.3	23.9
300	min	16.6	17.8	18.8	19.5	19.9	20.0	20.3
600	min	10.3	10.8	11.1	11.2	11.3	11.4	11.5
1200	min	5.37	5.65	5.80	5.92	5.96	6.01	6.10

- 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	162	188	201	216	210	214	219
10	min	95.8	110	122	131	134	137	140
15	min	76.4	86.5	93.7	97.9	99.2	101	103
30	min	41.6	47.7	51.4	53.0	53.6	54.2	54.9
60	min	27.9	31.5	33.2	34.4	34.7	35.1	35.6
120	min	16.1	17.4	18.3	19.0	19.2	19.5	19.8
180	min	12.4	13.2	13.7	14.1	14.2	14.4	14.6
240	min	10.2	10.8	11.2	11.5	11.6	11.7	11.8
300	min	8.84	9.22	9.53	9.74	9.81	9.88	9.97
600	min	4.98	5.24	5.42	5.53	5.57	5.62	5.68
1200	min	2.56	2.70	2.81	2.89	2.92	2.95	2.99

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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