

Specifications

Nominal Voltage(V)

12V

Nominal Power

15 mins rate: 450W/cell to 1.67V/cell

Nominal Capacity

20 hour rate	(5.75A to 10.50V)	115Ah
10 hour rate	(10.925A to 10.50V)	109.25Ah
8 hour rate	(12.94A to 10.50V)	103.5Ah
5 hour rate	(19.55A to 10.20V)	97.75Ah

Weight

Approx. 37.5kg(82.5Lbs.)

Internal Resistance (at 1KHz)

Approx. 2.5 mΩ

Maximum Discharge Current for

5 seconds: 1150A

Short Circuit Current (A) IEC 60896-21-22

3750A

Charging Methods at 25°C(77°F)

Maximum Charging Current :	34.5A
Boost Charging Voltage	14.1 to 14.4V
Boost Charge Time	8-9Hr
Float Charging Voltage	13.5 to 13.65V
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	96%
6 month	94%

Case Material

ABS UL94 V-0

Battery Construction

Component	Positive Plate	Negative plate	Safety valve	Terminal	Separator	Electrolyte
Raw material	Lead dioxide	Lead	Rubber	Lead	AGM	Sulfuric acid



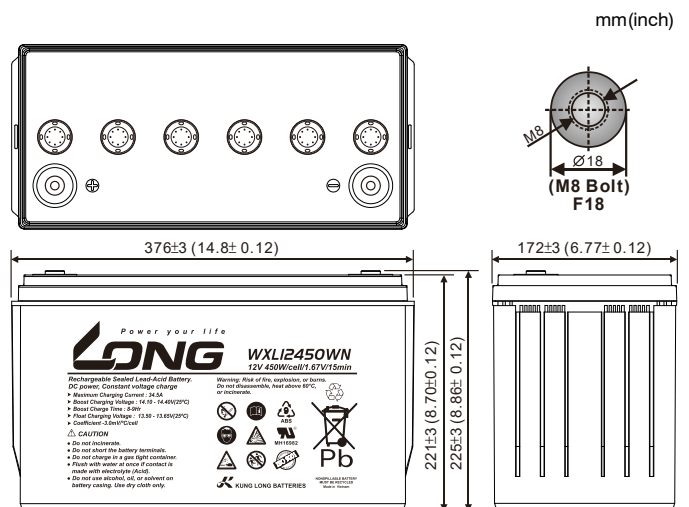
Dimensions

Length (L) 376±3(14.8±0.12)

Width (W) 172±3(6.77±0.12)

Height (H) 221±3 (8.70±0.12)

Overall Height (HT) 225±3 (8.86±0.12)



Terminal

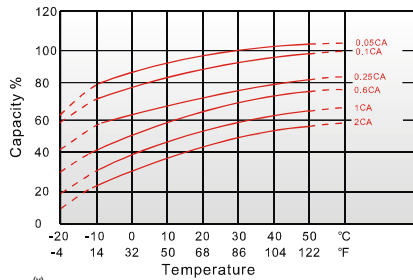
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Recommended torque value	M8: 12 N-m (122 kgf-cm)
Maximum allowable torque value	M8: 20 N-m (204 kgf-cm)

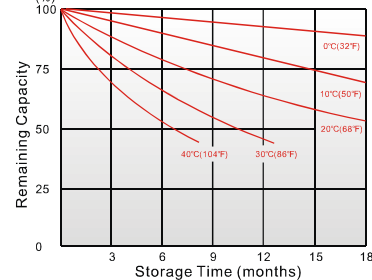
Design Life

Expected Trickle Design Life: 10-12 years at 20°C according to Eurobat.

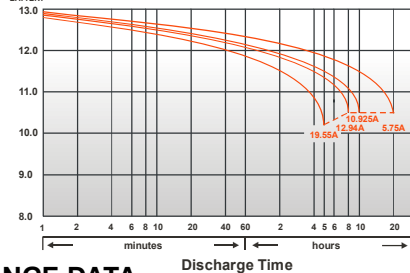
Effect of Temperature on Capacity 25°C(77°F)



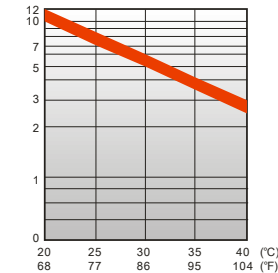
Capacity Retention Characteristic



Discharge Time VS. Discharge Current (25°C)



Trickle (or float) Service Life



- PERFORMANCE DATA

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

Time	End Voltage	1.85V	1.80V	1.75V	1.70V	1.67V	1.65V	1.60V
2	min	747	849	949	1023	1090	1154	1193
4	min	688	775	838	880	922	954	986
5	min	661	729	797	837	869	890	901
6	min	596	677	757	789	814	825	836
8	min	537	593	622	649	668	673	677
10	min	502	553	570	586	601	615	625
15	min	399	456	472	474	477	480	482
20	min	333	345	353	357	360	363	365
30	min	265	274	282	285	288	289	290
40	min	205	221	223	226	228	229	230
45	min	191	199	201	203	206	208	209
60	min	155	161	163	164	164	164	165
90	min	93.8	97.2	98.8	100.1	100.6	101.0	101.3
120	min	83.2	87.1	88.2	88.3	88.3	88.4	88.4
180	min	56.8	58.1	58.8	59.2	59.6	59.8	59.9
240	min	43.7	44.0	44.7	45.1	45.5	45.9	46.2
300	min	35.9	36.8	37.3	37.6	37.8	38.0	38.2
480	min	24.3	25.0	25.2	25.2	25.3	25.3	25.4
600	min	19.5	20.1	20.5	20.8	21.1	21.3	21.6
1200	min	11.3	11.7	11.9	12.1	12.4	12.5	12.6

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

Time	End Voltage	1.85V	1.80V	1.75V	1.70V	1.67V	1.65V	1.60V
2	min	363	452	510	560	594	628	656
4	min	327	393	454	507	526	539	552
5	min	312	373	416	450	478	495	504
6	min	290	336	375	392	398	403	407
8	min	283	314	346	359	371	380	388
10	min	249	272	300	312	323	330	338
15	min	201	212	222	233	240	248	256
20	min	167	183	192	194	196	197	199
30	min	131	135	138	141	144	146	148
40	min	101	106	112	115	116	117	118
45	min	93.0	97.0	99.0	101	103	104	105
60	min	73.4	75.0	76.7	78.3	79.8	81.3	82.4
90	min	48.3	54.0	57.0	58.0	58.6	58.9	59.2
120	min	40.1	42.0	43.6	43.8	43.9	44.0	44.2
180	min	25.6	28.8	29.4	29.6	29.7	29.8	29.9
240	min	19.7	20.3	21.1	21.9	22.4	22.7	22.9
300	min	17.1	17.4	18.2	19.1	19.1	19.1	19.2
480	min	11.8	12.3	12.5	12.6	12.7	12.7	12.8
600	min	11.0	11.5	11.8	12.1	12.2	12.2	12.3
1200	min	5.55	5.81	6.00	6.01	6.01	6.02	6.02

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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