

⚡ Specifications

Nominal Voltage(V)

12V

Nominal Power

15 mins rate: 100W/cell to 1.67V/cell

Nominal Capacity

20 hour rate	(1.4A to 10.50V)	28Ah
8 hour rate	(3.36A to 10.50V)	26.9Ah
5 hour rate	(4.76A to 10.20V)	23.8Ah

Weight

Approx. 9.2kg(20.2Lbs.)

Internal Resistance (at 1KHz)

Approx. 9.2mΩ

Maximum Discharge Current for

5 seconds: 420A

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

980 A

Charging Methods at 25°C(77°F)

Maximum Charging Current :	8.4A
Boost Charging Voltage	14.4 to 15.0V
Boost Charge Time	8-9Hr
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	96%
6 month	94%

Case Material

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

Battery Construction

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



⚡ Dimensions

Length (L)

166±²₁ (6.54±^{0.08}_{0.04})

Width (W)

125.5±²₁ (4.94±^{0.08}_{0.04})

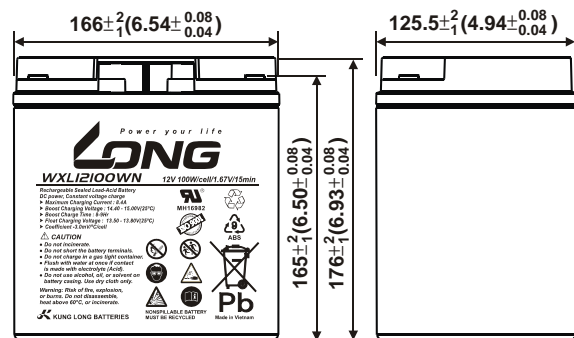
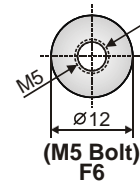
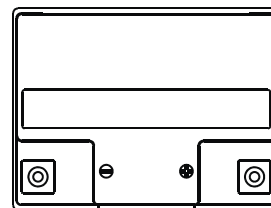
Height (H)

176±²₁ (6.93±^{0.08}_{0.04})

Overall Height (HT)

176±²₁ (6.93±^{0.08}_{0.04})

mm(inch)



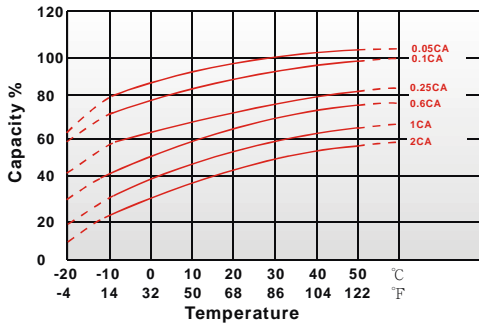
Terminal

F6
Recommended torque value M5: 4 N-m (41kgf-cm)
Maximum allowable torque value M5: 6 N-m (61kgf-cm)

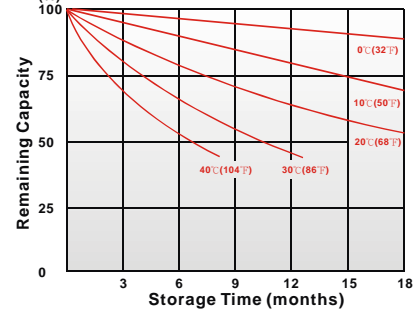
Design Life

Expected Trickle Design Life: 6-9 years at 20°C according to Eurobat.

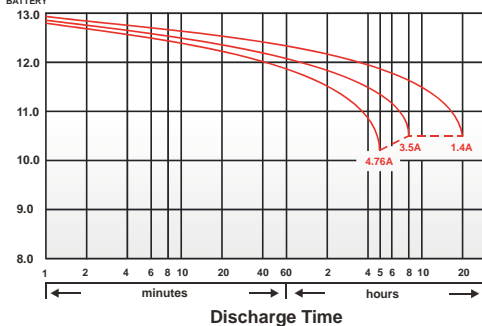
Effect of Temperature on Capacity 25°C (77°F)



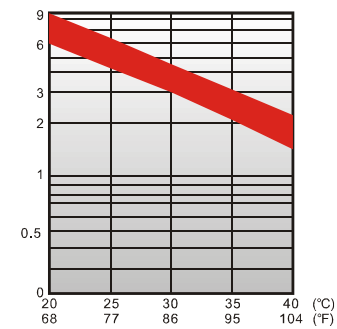
Capacity Retention Characteristic



(h) FOR 12V BATTERY 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	181	210	234	245	255	264	273
4	min	157	172	186	199	211	221	231
5	min	139	161	179	186	191	196	200
6	min	130	156	166	173	180	185	190
8	min	125	139	145	150	155	160	165
10	min	107	118	124	128	133	135	137
15	min	86.4	94.7	102	104	106	108	110
20	min	76.6	82.3	83.4	84.3	85.1	85.9	86.7
30	min	54.4	58.7	59.9	60.7	61.4	62.1	62.8
45	min	45.4	48.5	49.4	49.9	50.3	50.6	50.9
60	min	35.0	36.5	36.9	37.2	37.5	37.8	38.2
90	min	25.0	25.9	26.5	26.9	27.3	27.5	27.7
120	min	21.0	21.9	22.3	22.5	22.6	22.8	23.0
180	min	15.5	16.2	16.4	16.6	16.7	16.8	16.9
240	min	11.9	12.4	12.7	12.8	12.9	13.0	13.1
300	min	10.0	10.4	10.5	10.6	10.7	10.8	10.9
600	min	5.56	5.72	5.85	5.86	5.88	5.89	5.91
1200	min	3.00	3.03	3.09	3.11	3.12	3.14	3.15

- 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	92.5	115	133	148	158	167	172
4	min	80.5	96.5	109	114	119	124	128
5	min	72.5	88.0	102	107	112	116	119
6	min	70.8	83.8	90.5	96.9	103	108	113
8	min	68.3	75.3	81.6	85.4	88.4	90.6	92.6
10	min	57.1	63.9	66.2	69.6	72.4	75.2	77.7
15	min	44.6	49.0	52.7	54.6	56.1	57.6	58.6
20	min	35.7	39.2	42.1	43.7	44.9	46.1	46.9
30	min	27.8	29.9	31.0	31.9	32.6	33.2	33.4
45	min	21.1	22.6	23.0	24.2	24.7	24.9	25.1
60	min	16.3	17.4	18.1	18.6	19.1	19.3	19.4
90	min	12.6	13.6	14.0	14.4	14.7	15.0	15.2
120	min	10.6	11.3	11.5	11.8	11.9	12.2	12.3
180	min	7.39	7.69	7.94	8.05	8.18	8.35	8.38
240	min	5.97	6.09	6.23	6.34	6.41	6.48	6.51
300	min	4.95	5.08	5.19	5.33	5.38	5.42	5.45
600	min	2.74	2.82	2.91	2.93	2.95	2.97	2.98
1200	min	1.45	1.48	1.51	1.53	1.54	1.55	1.56

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