

Specifications

Nominal Voltage(V)

12V

Nominal Capacity

20 hour rate	(5A to 10.50V)	100Ah
10 hour rate	(10A to 10.80V)	100Ah
5 hour rate	(17A to 10.20V)	85Ah
1 hour rate	(60A to 9.60V)	60Ah
1C	(100A to 9.60V)	63.33Ah

Weight

Approx. 31kg(68.2Lbs.)

Internal Resistance (at 1KHz)

Approx. 4.5 mΩ

Maximum Discharge Current for

5 seconds:1200A

Charging Methods at 25°C(77°F)

Cycle use:	
Charging Voltage	14.4 to 15.0V
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

F18

Battery Construction



Dimensions

Length (L)

306±²₁ (12.05±^{0.08}_{0.04})

Width (W)

168±²₁ (6.61±^{0.08}_{0.04})

Height (H)

208±²₁ (8.19±^{0.08}_{0.04})

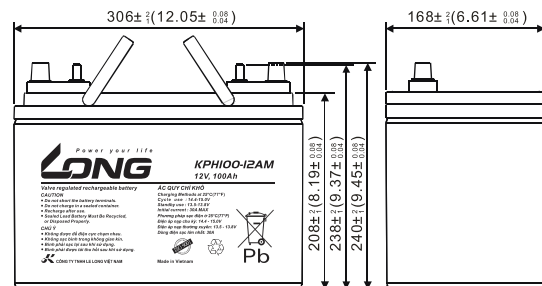
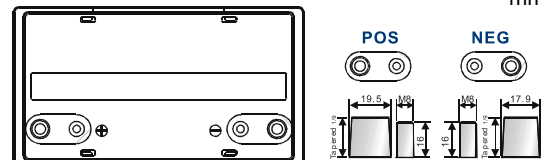
Overall Height (HT)

240±²₁ (9.45±^{0.08}_{0.04})

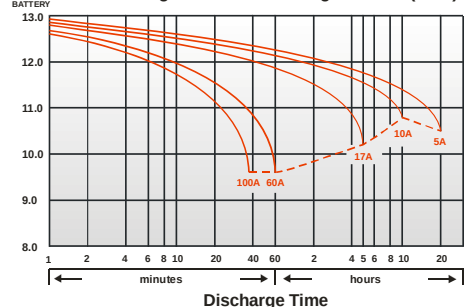
Description of torque value of hard ware for the terminals:

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

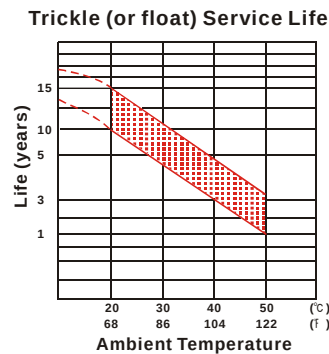
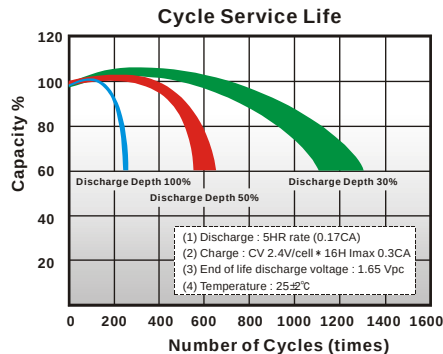
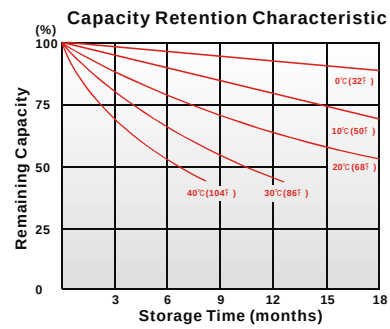
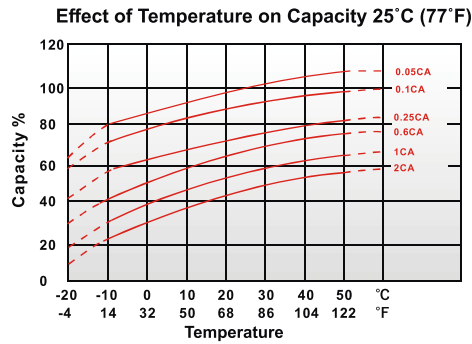
mm(inch)



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



Component	Positive Plate	Negative plate	Safety valve	Terminal	Separator	Electrolyte
Raw material	Lead dioxide	Lead	Rubber	SAE auto-posts & M8 Stainless screw	AGM	Sulfuric acid



- 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	490	545	575	600	605	610	615
10	min	425	450	468	485	490	495	500
15	min	319	349	374	384	394	402	410
20	min	276	289	300	305	308	310	312
30	min	193	203	210	218	222	227	230
60	min	89.8	100	109	117	124	131	138
90	min	87.5	92.0	92.9	93.3	93.5	93.7	93.8
120	min	68.3	71.6	74.2	75.1	75.8	76.5	77.0
180	min	52.6	54.5	55.5	56.5	57.3	58.1	58.8
240	min	35.1	37.2	39.2	40.4	41.6	42.4	43.2
300	min	33.8	35.5	36.7	37.0	37.3	37.5	37.7
600	min	18.9	19.5	19.9	20.1	20.3	20.5	20.7
1200	min	10.3	10.6	10.9	11.1	11.2	11.3	11.4

- 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
Time								
5	min	250	290	320	335	348	353	358
10	min	205	235	260	279	286	291	294
15	min	166	186	201	211	216	221	225
20	min	145	155	162	167	171	175	178
30	min	98.5	105	110	114	118	122	126
60	min	60.0	62.2	64.1	65.9	67.2	68.5	69.6
90	min	48.1	49.5	50.5	51.0	51.2	51.4	51.6
120	min	36.2	37.2	38.1	38.6	39.0	39.3	39.5
180	min	27.9	28.8	29.4	29.7	30.0	30.2	30.4
240	min	18.4	19.4	20.1	20.3	20.5	20.6	20.7
300	min	15.6	16.5	17.2	17.7	18.0	18.2	18.4
600	min	9.70	10.0	10.2	10.4	10.5	10.6	10.7
1200	min	5.07	5.23	5.36	5.38	5.40	5.42	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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