

Specifications

Nominal Voltage(V)

12V

Nominal Capacity

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

Weight

Approx. 31.3kg(68.9Lbs.)

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 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



Dimensions

Length (L) 329.5±3 (12.97±0.12)

Width (W) 172.3±3 (6.78±0.12)

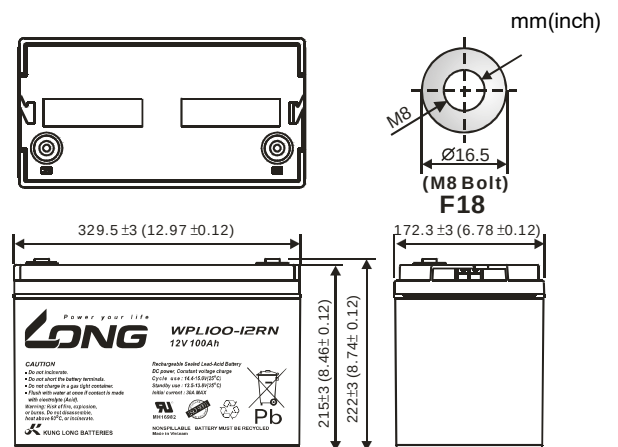
Height (H) 215±3 (8.46±0.12)

Overall Height (HT) 222±3 (8.74±0.12)

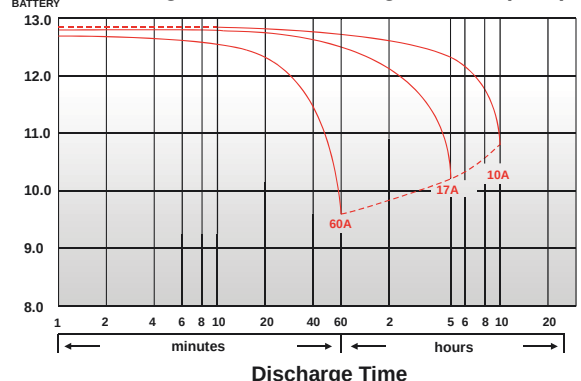
Description of torque value of hard ware for the terminals:

Recommended torque value M8:12 N-m (122kgf-cm)

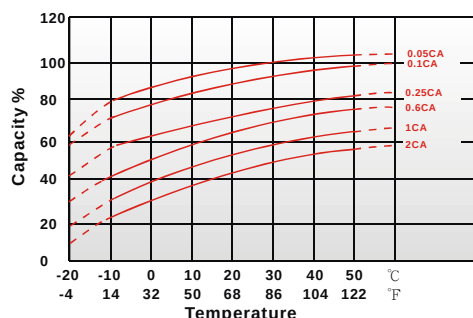
Maximum allowable torque value M8:15 N-m (153kgf-cm)



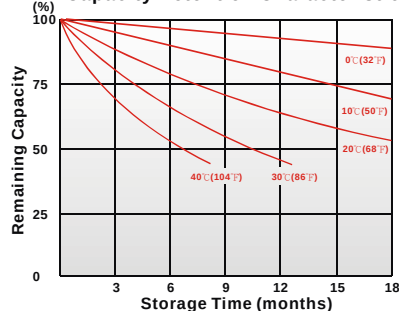
(v) FOR 12V BATTERY Discharge Time VS. Discharge Current (25°C)



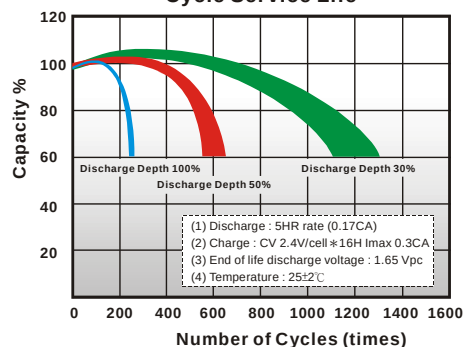
Effect of Temperature on Capacity 25°C (77°F)



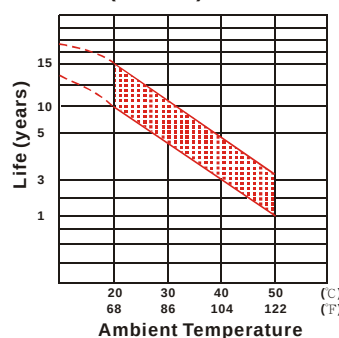
Capacity Retention Characteristic



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	1.65V	1.60V
Time							
10	min	342	370	397	414	433	465
15	min	285	315	345	358	373	383
20	min	250	272	299	303	319	333
30	min	207	222	230	234	235	238
60	min	123	132	140	141	143	145
180	min	49.9	53.2	55.2	55.6	56.7	58.2
300	min	33.4	35.5	37.3	37.7	38.0	38.3
600	min	18.8	19.2	19.3	19.7	20.0	20.2
1200	min	9.75	9.9	10.1	10.4	10.5	10.6

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

End Voltage		1.85V	1.80V	1.75V	1.70V	1.65V	1.60V
Time							
10	min	176	199	221	238	249	263
15	min	151	168	182	194	202	212
20	min	133	146	161	165	174	184
30	min	107	114	120	121	122	123
60	min	59.1	64.3	68.0	70.4	71.6	73.5
180	min	27.3	28.1	28.6	29.5	29.7	30.1
300	min	16.9	18.1	18.5	18.7	19.1	19.2
600	min	9.40	10.2	10.3	10.4	10.5	10.6
1200	min	5.05	5.16	5.22	5.43	5.49	5.54

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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