

### ⚡ 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
1C	(100A	to	9.60V)	63.33Ah

#### Weight

Approx. 30.0kg(66.0Lbs.)

#### Internal Resistance (at 1KHz)

Approx. 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

F8



### ⚡ Dimensions

#### Length (L)

307±3 (12.09±0.12)

#### Width (W)

168±3 (6.61±0.12)

#### Height (H)

208±3 (8.19±0.12)

#### Overall Height (HT)

214±3 (8.43±0.12)

#### Description of torque value of hard ware for the terminals:

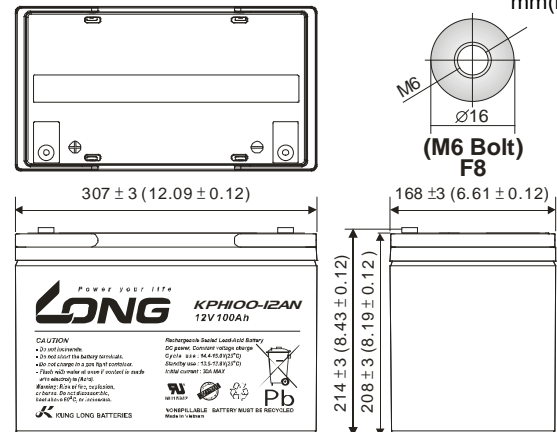
Recommended torque value

M6: 7 N-m (71kgf-cm)

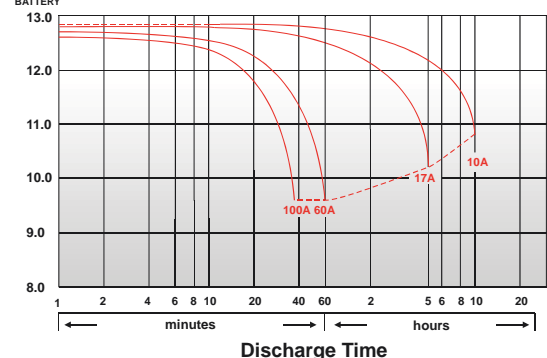
Maximum allowable torque value

M6: 10 N-m(102kgf-cm)

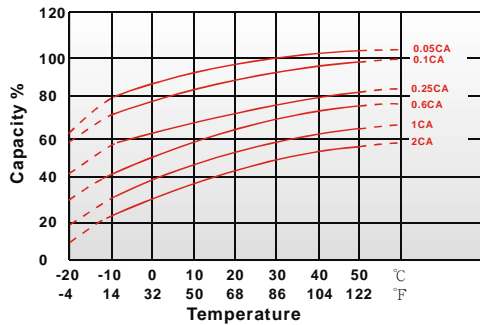
mm(inch)



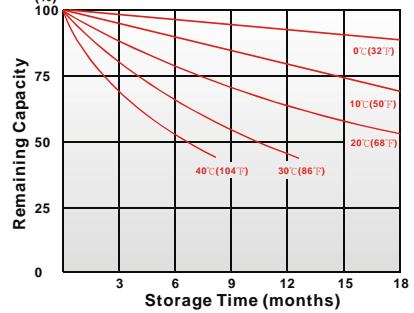
#### (V) FOR 12V BATTERY Discharge Time VS. Discharge Current (25°C)



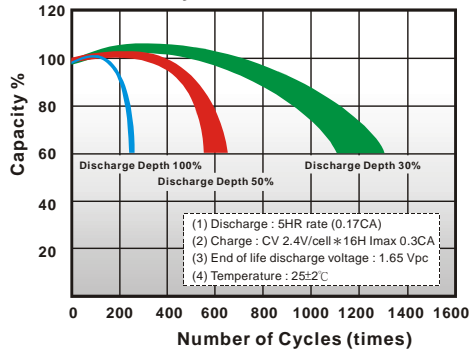
Effect of Temperature on Capacity 25°C(77°F)



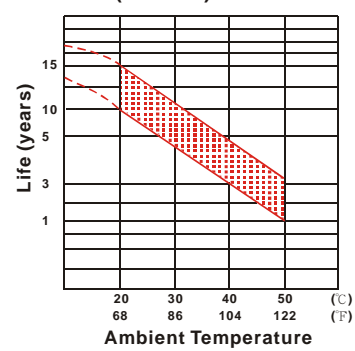
Capacity Retention Characteristic



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								
10	min	385	410	428	448	463	473	480
15	min	298	324	345	360	370	380	385
30	min	193	203	210	218	222	227	230
60	min	89.8	100	109	117	123	133	138
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								
10	min	195	220	239	254	269	279	286
15	min	155	175	190	197	202	205	208
30	min	98.5	105	110	114	118	122	126
60	min	60.0	62.2	64.1	65.9	66.9	67.7	69.6
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	16.8	17.7	18.4	18.6	18.8	18.9	19.0
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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