

### ⚡ Specifications

#### Nominal Voltage(V)

12V

#### Nominal Capacity

10 hour rate	(8A	to	10.80V)	80Ah
5 hour rate	(13.6A	to	10.20V)	68Ah
1 hour rate	(48A	to	9.60V)	48Ah
1C	(80A	to	9.60V)	50.67Ah

#### Weight

Approx. 24.2kg(53.2Lbs.)

#### Internal Resistance (at 1KHz)

Approx. 5 mΩ

#### Maximum Discharge Current for

5 seconds:960A

#### Charging Methods at 25°C(77°F)

Maximum Charging Current :	24A
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)

260±2-1 (10.24±0.08-0.04)

#### Width (W)

170±2-1 (6.69±0.08-0.04)

#### Height (H)

202±2-1 (7.95±0.08-0.04)

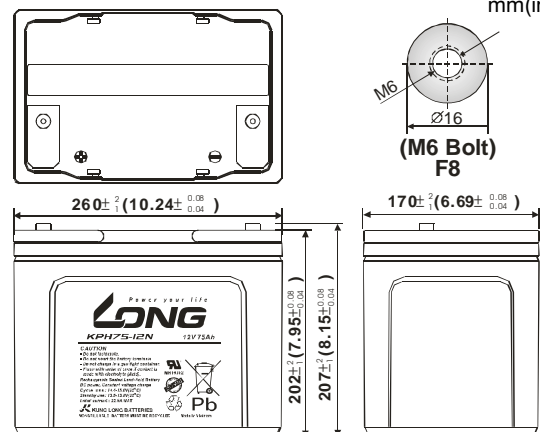
#### Overall Height (HT)

207±2-1 (8.15±0.08-0.04)

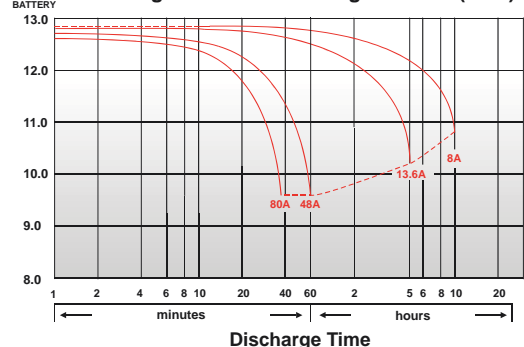
#### Description of torque value of hard ware for the terminals:

Recommended torque value	M6:7 N-m (71kgf-cm)
Maximum allowable torque value	M6:9 N-m (92kgf-cm)

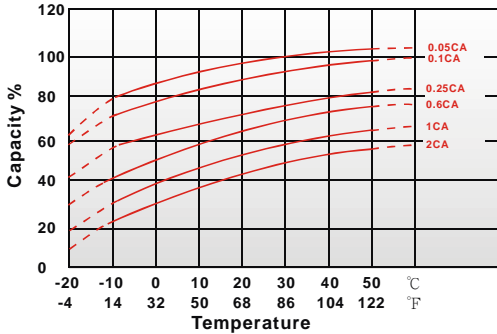
mm(inch)



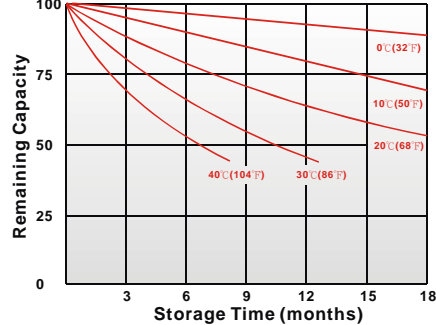
#### (V) FOR 12V BATTERY Discharge Time VS. Discharge Current (25°C)



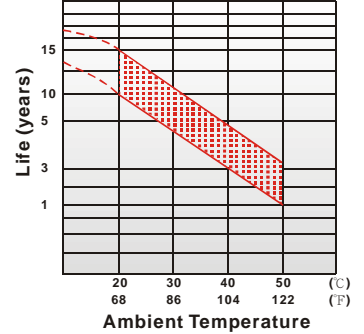
Effect of Temperature on Capacity 25°C (77°F)



Capacity Retention Characteristic



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	min							
5	min	407	429	491	521	537	552	567
10	min	278	294	336	357	368	378	388
15	min	178	225	240	274	280	287	294
30	min	139	149	155	159	160	162	165
60	min	80.8	85.3	87.8	89.8	90.5	91.3	92.3
120	min	47.2	49.8	51.3	52.7	53.2	53.7	54.3
180	min	34.0	35.8	36.8	37.7	38.0	38.3	38.8
240	min	27.8	28.8	29.7	30.3	30.5	30.8	31.2
300	min	24.8	25.3	25.7	26.0	26.2	26.3	26.5
600	min	15.0	15.2	15.3	15.5	15.5	15.6	15.6
1200	min	7.85	7.97	8.07	8.15	8.20	8.23	8.28

**- 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	min							
5	min	178	214	245	272	281	292	304
10	min	112	143	167	186	192	199	207
15	min	90.5	109	124	138	141	145	150
30	min	63.2	72.6	79.4	84.5	85.6	87.2	89.0
60	min	38.6	41.5	43.3	44.8	45.3	45.9	46.7
120	min	20.2	22.4	23.9	25.0	25.4	25.8	26.3
180	min	15.8	17.4	18.4	19.3	19.6	20.0	20.4
240	min	12.9	13.9	14.7	15.3	15.6	15.9	16.2
300	min	11.8	12.6	13.1	13.4	13.6	13.8	14.1
600	min	7.53	7.62	7.69	7.74	7.76	7.81	7.85
1200	min	3.87	3.93	3.98	4.02	4.03	4.05	4.08

All data on the spec. sheet is an average value:

The tolerance range : X<6min(+15%~-15%), 6min ≤ X<10min(+12%~-12%), 10min ≤ X < 60min(+8%~-8%), X ≥ 60min(+5%~-5%)

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