

### ⚡ 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)

Cycle use:

Charging Voltage 14.4 to 15.0V

Coefficient -5.0mV/°C/cell

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:

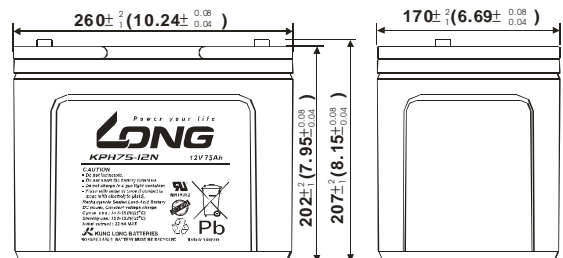
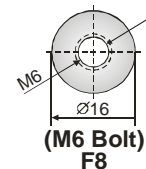
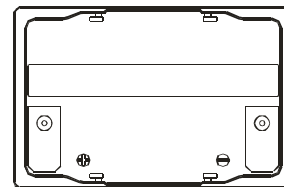
Recommended torque value

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

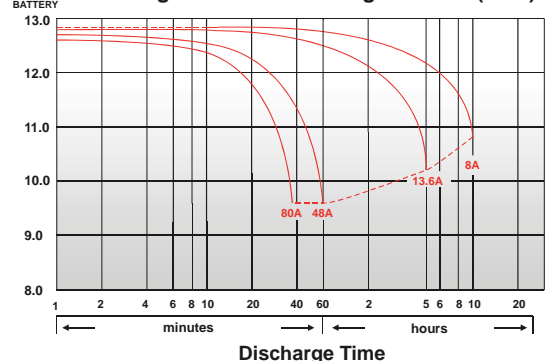
Maximum allowable torque value

M6:9 N-m (92kgf-cm)

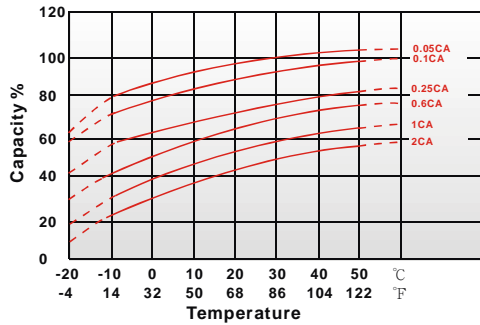
mm(inch)



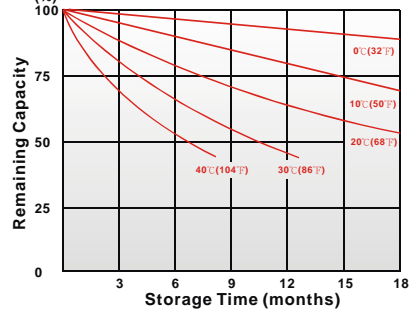
(V) FOR 12V BATTERY Discharge Time VS. Discharge Current (25°C)



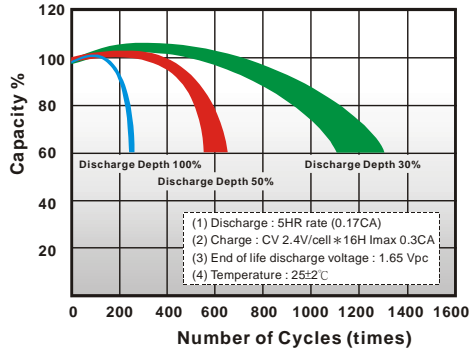
Effect of Temperature on Capacity 25°C(77°F)



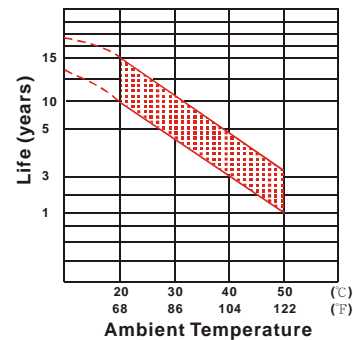
Capacity Retention Characteristic



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

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

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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