

### Specifications

#### Nominal Voltage(V)

12V

#### Nominal Capacity

10 hour rate	(12A	to	10.80V)	120Ah
5 hour rate	(20.4A	to	10.20V)	102Ah
1 hour rate	(72A	to	9.60V)	72Ah

#### Weight

Approx. 35.5kg(78.1Lbs.)

#### Internal Resistance (at 1KHz)

Approx. 5.5 mΩ

#### Maximum Discharge Current for

5 seconds: 1200A

#### Charging Methods at 25°C(77°F)

Maximum Charging Current :	36A
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 & Standard

Expected Trickle Design Life: 10-12 years at 20°C according to Eurobat.

#### Terminal

F18

Trickle use

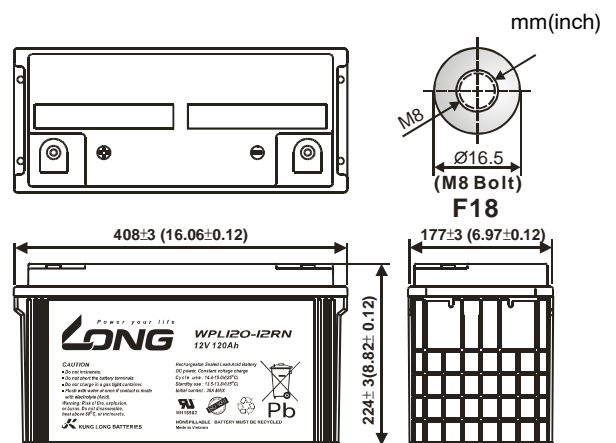


### Dimensions

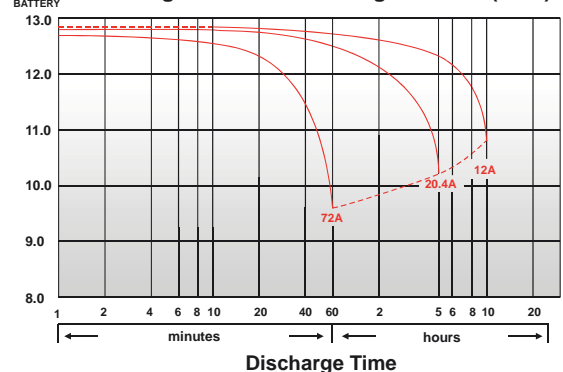
Length (L)	408±3 (16.06±0.12)
Width (W)	177±3 (6.97±0.12)
Height (H)	224±3 (8.82±0.12)
Overall Height (HT)	224±3 (8.82±0.12)

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

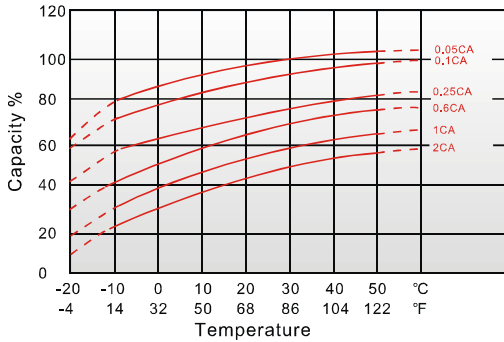
Recommended torque value	M8:12 N·m (122kgf·cm)
Maximum allowable torque value	M8:15 N·m (153kgf·cm)



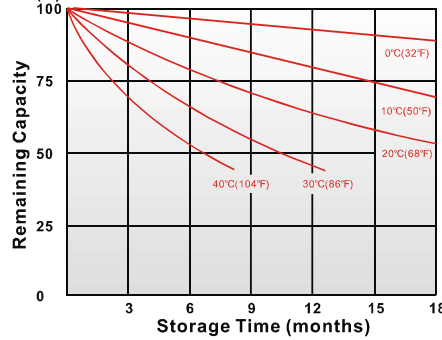
#### Discharge Time VS. Discharge Current (25°C)



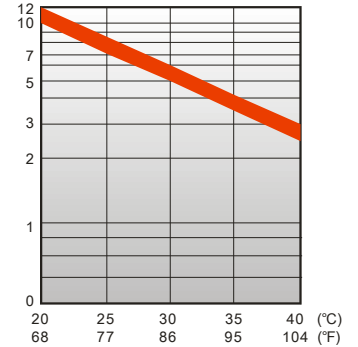
Effect of Temperature on Capacity 25°C(77°F)



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		1.80V	1.75V	1.70V	1.65V	1.60V
10	min	388	415	437	461	486
15	min	332	358	371	384	396
30	min	209	216	224	231	238
45	min	161	165	168	183	184
60	min	130	134	138	144	148
90	min	93.0	95.6	97.7	102	105
180	min	55.7	56.8	57.8	59.4	62.2
300	min	38.9	39.3	40.2	40.8	41.5
480	min	27.3	27.8	28.1	28.5	28.8
600	min	23.4	23.9	24.2	24.4	24.5

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

End Voltage		1.80V	1.75V	1.70V	1.65V	1.60V
10	min	215	239	245	265	281
15	min	169	182	190	199	206
30	min	111	113	118	122	126
45	min	87.0	90.0	92.0	94.0	96.0
60	min	70.0	73.0	75.0	77.0	79.0
90	min	51.0	53.0	55.0	57.0	59.0
180	min	32.5	35.0	35.6	36.1	36.6
300	min	20.3	21.0	21.5	21.7	21.9
480	min	14.1	14.5	14.7	15.0	15.1
600	min	12.5	12.6	12.7	12.8	13.0

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%)

080519-1J