

Trickle use

### 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)

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 & Standard

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

#### Terminal

F18



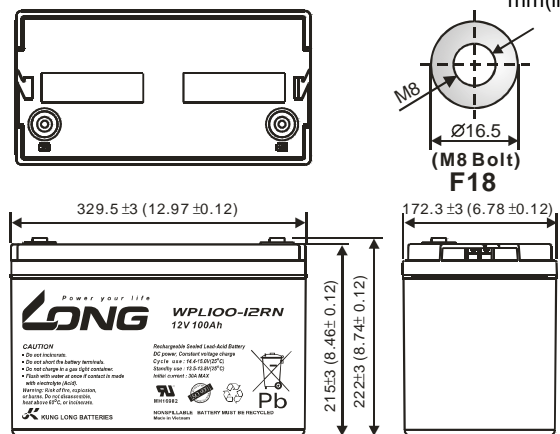
### Dimensions

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)

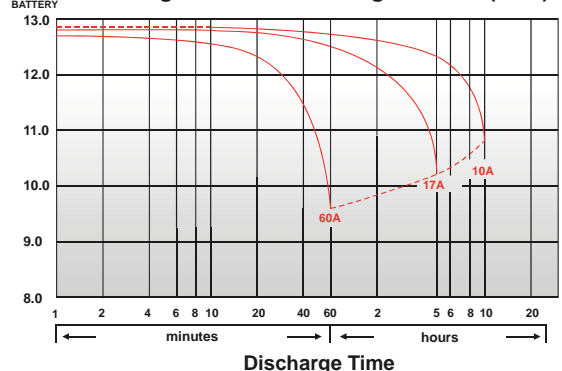
#### Description of torque value of hard ware for the terminals:

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

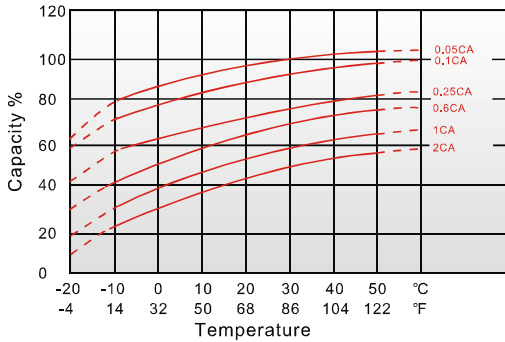
mm(inch)



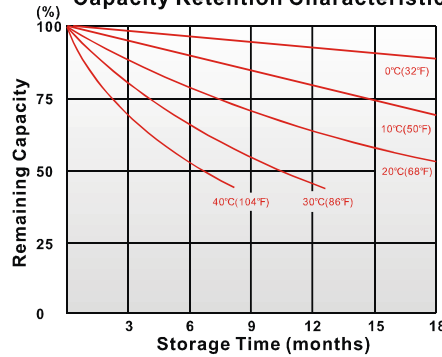
(V) FOR 12V BATTERY Discharge Time VS. Discharge Current (25°C)



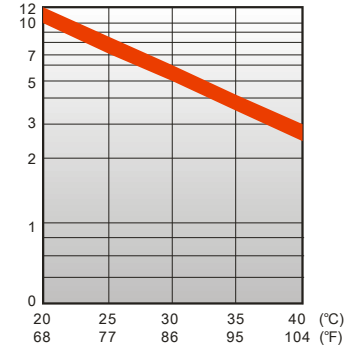
Effect of Temperature on Capacity 25°C(77°F)



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	1.65V	1.60V
10	min	355	388	415	440	460	480
15	min	295	327	355	368	378	385
20	min	253	275	302	315	327	336
30	min	210	220	233	236	239	241
60	min	128	134	140	143	145	147
180	min	50.4	53.7	55.8	57.6	58.6	59.2
300	min	33.8	35.5	37.3	37.7	38.0	38.3
600	min	19.2	19.9	20.2	20.5	20.8	21.0
1200	min	10.5	10.8	11.1	11.2	11.4	11.6

#### - 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
10	min	186	212	235	256	274	287
15	min	168	181	191	200	206	212
20	min	134	147	163	171	178	185
30	min	113	121	127	130	132	134
60	min	61	65.3	69.5	71.7	72.8	73.9
180	min	28.3	29.1	29.8	30.4	30.7	30.9
300	min	17.1	17.9	18.7	18.9	19.1	19.3
600	min	9.81	10.1	10.3	10.5	10.7	10.8
1200	min	5.13	5.28	5.42	5.45	5.48	5.50

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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