

## WP22-12NE 12Volt 22Ah

### Specifications

Nominal Voltage(V) **12V**

#### Nominal Capacity

20 hour rate	(1.1A	to	10.50V)	<b>22Ah</b>
10 hour rate	(2.09A	to	10.50V)	<b>20.9Ah</b>
5 hour rate	(3.74A	to	10.20V)	<b>18.7Ah</b>
1 C	(22A	to	9.60V)	<b>13.93Ah</b>
3 C	(66A	to	9.60V)	<b>8.8Ah</b>

Weight **Approx. 6.7kg(14.74Lbs.)**

Internal Resistance (at 1KHz) **Approx. 9 mΩ**

Maximum Discharge Current for  
5 seconds: **330A**

#### Charging Methods at 25°C (77°F)

Cycle use:

Charging Voltage **14.4 to 15.0V**

Coefficient **-5.0mV/°C/cell**

Maximum Charging Current : **6.6A**

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 **92%**

3 month **90%**

6 month **80%**

#### Case Material

**ABS**

(Option: UL94 HB & UL94 V-0 flame retardant )

#### Terminal

**F8**

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

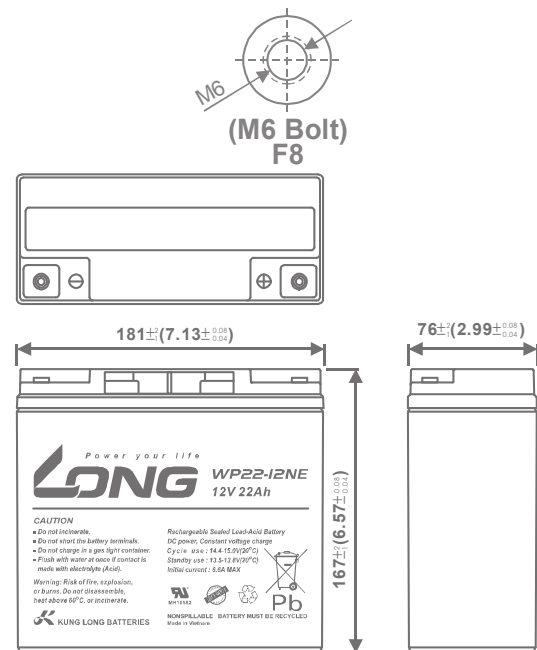
Recommended torque value **M6: 5.39 N-m (55kg-cm)**

Maximum allowable torque value **M6: 8.82 N-m (90kg-cm)**

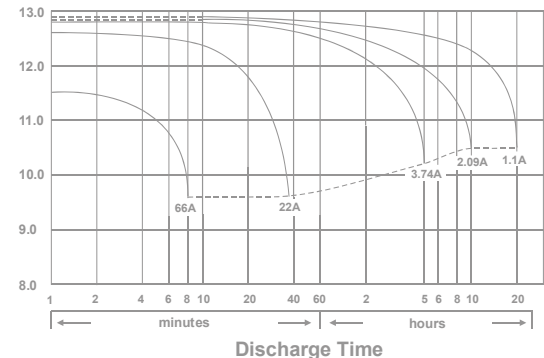


### Dimensions

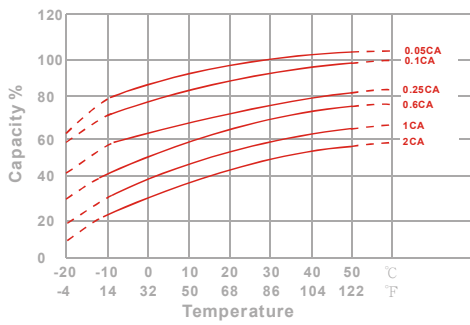
mm(inch)



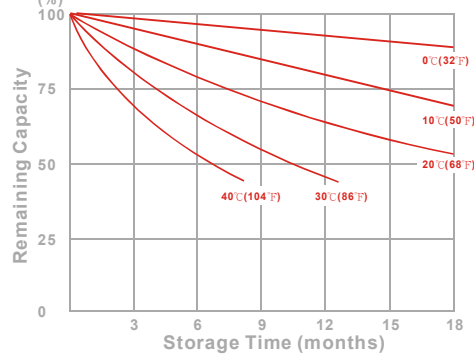
(V) FOR 12V BATTERY Discharge Time VS. Discharge Current (25°C)



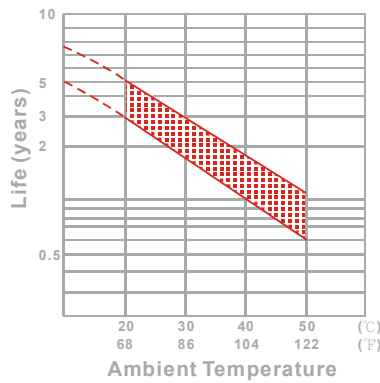
**Effect of Temperature on Capacity 25°C (77°F)**



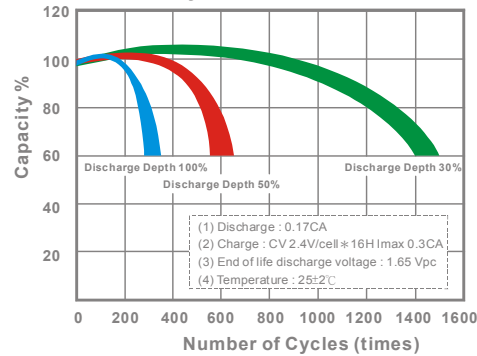
**Capacity Retention Characteristic**



**Trickle (or float) Service Life**



**Cycle 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
<b>Time</b>								
5	min	815	912	982	1025	1037	1050	1062
10	min	530	598	643	671	677	687	694
15	min	405	451	481	499	504	510	515
30	min	239	264	280	290	293	296	298
60	min	151	156	160	163	164	165	166
120	min	90.9	93.1	94.4	95.6	96.0	96.5	97.3
180	min	64.5	66.3	67.5	68.4	68.8	69.1	69.6
240	min	51.6	53.2	54.1	54.8	55.2	55.5	55.9
300	min	43.5	44.9	45.9	46.7	47.0	47.2	47.5
600	min	24.7	25.9	26.8	27.4	27.6	27.8	28.0
1200	min	13.2	13.7	14.1	14.4	14.5	14.6	14.7

**- 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
<b>Time</b>								
5	min	74.8	83.3	90.1	97.6	99.3	102	105
10	min	48.1	54.0	57.4	59.9	60.8	61.5	62.3
15	min	36.6	41.4	43.1	44.4	44.8	45.3	45.9
30	min	20.0	22.1	23.5	24.2	24.4	24.7	25.1
60	min	12.4	12.8	13.1	13.4	13.5	13.6	13.8
120	min	7.61	7.83	7.98	8.12	8.16	8.21	8.27
180	min	5.32	5.51	5.64	5.75	5.79	5.83	5.88
240	min	4.17	4.33	4.45	4.54	4.58	4.61	4.65
300	min	3.56	3.68	3.77	3.84	3.87	3.89	3.92
600	min	2.06	2.14	2.21	2.26	2.27	2.29	2.31
1200	min	1.07	1.12	1.16	1.19	1.20	1.21	1.22

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