

### ⚡ Specifications

#### Nominal Voltage(V)

12V

#### Nominal Capacity

20 hour rate	(1.6A to 10.50V)	32Ah
5 hour rate	(5.44A to 10.20V)	27.2Ah
1 hour rate	(17.6A to 9.60V)	17.6Ah
1 C	(32A to 9.60V)	17.07Ah

#### Weight

Approx. 10.4kg(22.88lbs.)

#### Internal Resistance (at 1KHz)

Approx. 9 mΩ

#### Maximum Discharge Current for

5 seconds:480A

#### Charging Methods at 25°C(77°F)

Cycle use:

Charging Voltage 13.8 to 14.4V

Coefficient -5.0mV/°C/cell

Maximum Charging Current : 9.6A

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 97%

3 month 92%

6 month 85%

#### Case Material

ABS UL94 HB

Option: Flammability resistance of (UL94 V-0)

#### Design Life

7-10 Years.

#### Terminal

F4



### ⚡ Dimensions

#### Length (L)

197 ±<sub>1</sub><sup>2</sup> (7.76 ±<sub>0.04</sub><sup>0.08</sup>)

#### Width (W)

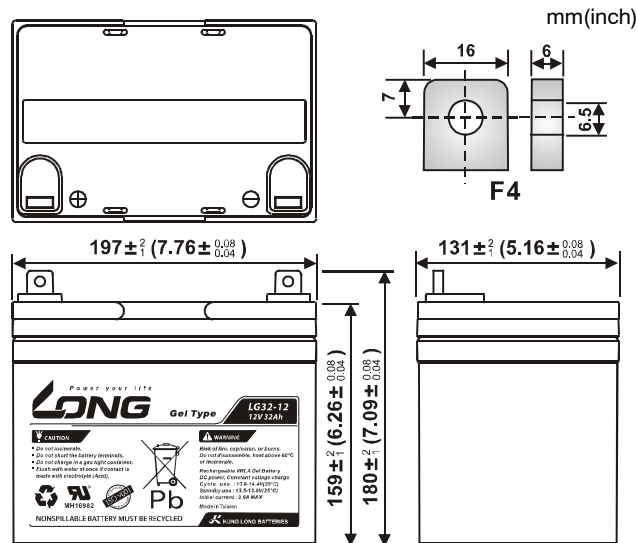
131 ±<sub>1</sub><sup>2</sup> (5.16 ±<sub>0.04</sub><sup>0.08</sup>)

#### Height (H)

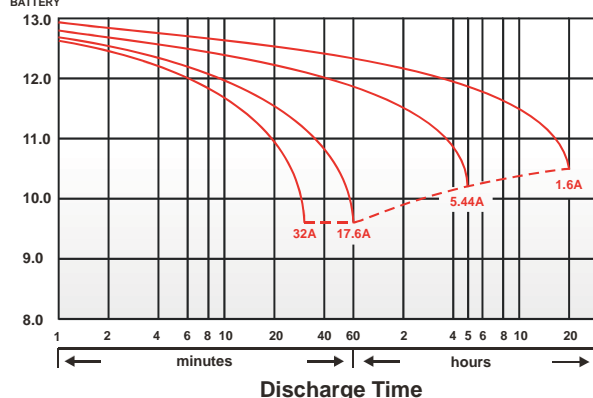
159 ±<sub>1</sub><sup>2</sup> (6.26 ±<sub>0.04</sub><sup>0.08</sup>)

#### Overall Height (HT)

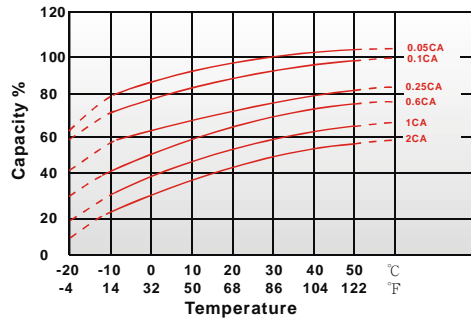
180 ±<sub>1</sub><sup>2</sup> (7.09 ±<sub>0.04</sub><sup>0.08</sup>)



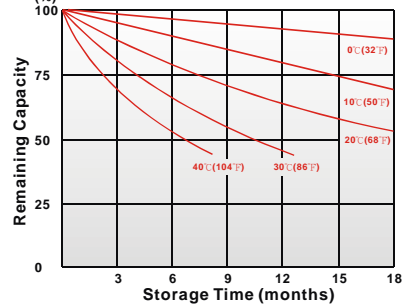
(V) FOR 12V BATTERY Discharge Time VS. Discharge Current (25°C)



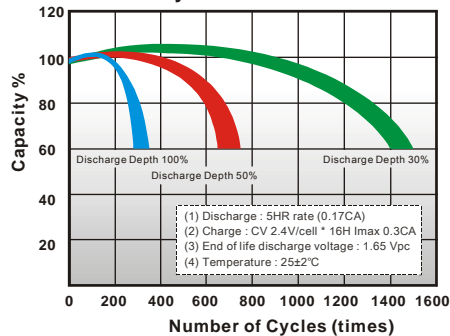
Effect of Temperature on Capacity 25°C (77°F)



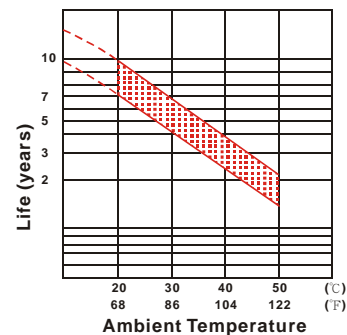
Capacity Retention Characteristic



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								
5	min	109	148	177	196	202	208	217
10	min	81.8	107	126	138	142	146	152
15	min	65.2	84.6	99.0	108	111	114	118
30	min	35.3	46.1	54.0	58.9	60.5	62.4	64.6
60	min	32.3	34.7	36.1	36.9	37.2	37.7	38.0
120	min	21.0	22.1	22.7	23.2	23.4	23.7	23.8
180	min	14.0	14.9	15.6	16.0	16.2	16.3	16.5
240	min	11.7	12.4	12.9	13.2	13.4	13.5	13.6
300	min	10.2	10.9	11.3	11.5	11.6	11.8	11.9
600	min	6.14	6.53	6.79	6.93	7.15	7.06	7.12
1200	min	3.25	3.43	3.58	3.64	3.68	3.71	3.74

### - 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								
5	min	73.6	88.3	97.5	115	119	124	129
10	min	55.8	65.1	70.8	74.9	76.6	79.0	81.9
15	min	39.3	47.6	53.8	58.9	60.1	61.0	62.3
30	min	25.0	28.7	30.2	31.4	31.8	32.3	32.9
60	min	15.1	16.3	17.1	17.8	18.0	18.3	18.6
120	min	9.81	10.5	11.0	11.4	11.5	11.7	11.9
180	min	6.97	7.54	7.98	8.13	8.19	8.28	8.41
240	min	5.51	5.96	6.31	6.49	6.54	6.61	6.70
300	min	5.15	5.42	5.59	5.71	5.76	5.83	5.90
600	min	2.96	3.15	3.27	3.35	3.38	3.41	3.45
1200	min	1.58	1.66	1.71	1.75	1.76	1.78	1.80

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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