

## WP12-12E 12Volt 12Ah

### Specifications

Nominal Voltage(V) **12V**

#### Nominal Capacity

20 hour rate	(0.6A	to	10.50V)	<b>12Ah</b>
10 hour rate	(1.14A	to	10.50V)	<b>11.4Ah</b>
5 hour rate	(2.04A	to	10.20V)	<b>10.2Ah</b>
1 C	(12A	to	9.60V)	<b>6.8Ah</b>
3 C	(36A	to	9.60V)	<b>4.8Ah</b>

Weight **Approx. 3.9kg(8.58Lbs.)**

Internal Resistance (at 1KHz) **Approx. 13 mΩ**

#### Maximum Discharge Current for

5 seconds: **180A**

#### Charging Methods at 25 (77 )

##### Cycle use:

Charging Voltage **14.4 to 15.0V**

Coefficient -5.0mV/ /cell

Maximum Charging Current : **3.6A**

##### Standby use:

Float Charging Voltage **13.5 to 13.8V**

Coefficient -3.0mV/ /cell

#### Operating Temperature Range

Charge **-15 (5 ) to 40 (104 )**

Discharge **-15 (5 ) to 50 (122 )**

Storage **-15 (5 ) to 40 (104 )**

#### Charge Retention (shelf life) at 20 (68 )

1 month **92%**

3 month **90%**

6 month **80%**

Case Material **ABS**

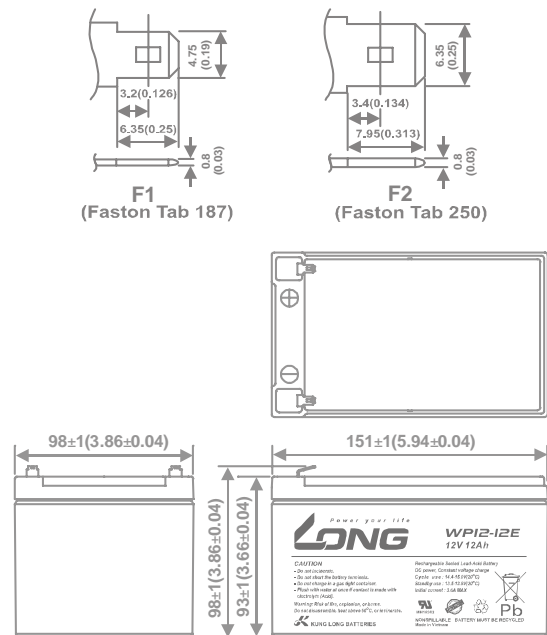
(Option: UL94 HB & UL94 V-0 flame retardant )

Terminal **F1 or F2 (Faston Tab 187 or 250)**

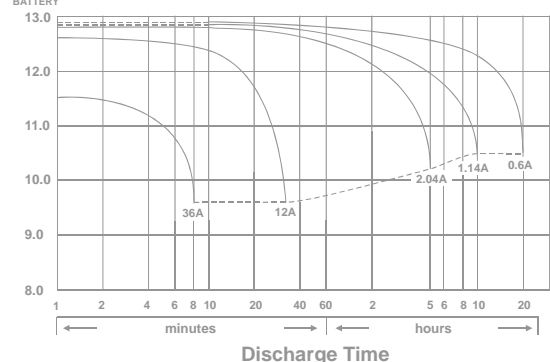


### Dimensions

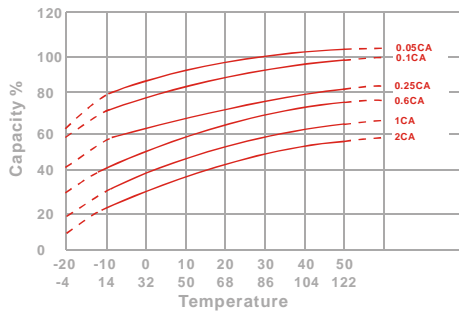
mm(inch)



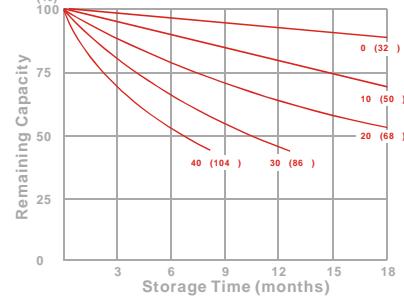
(V) Discharge Time VS. Discharge Current (25 )



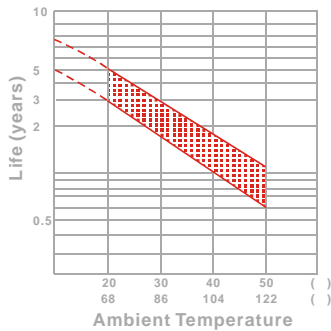
Effect of Temperature on Capacity 25 (77 )



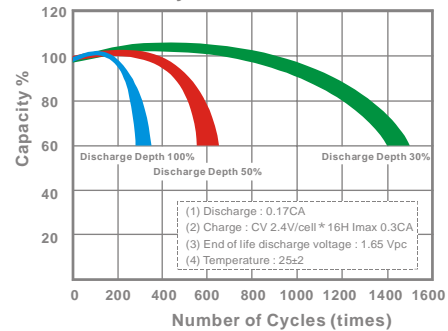
Capacity Retention Characteristic



Trickle (or float) Service Life



Cycle Service Life



## - PERFORMANCE DATA

Discharge Rates in Watts to Various End Voltages at 25 (77 )

End Voltage		1.85V	1.80V	1.75V	1.70V	1.67V	1.65V	1.60V
Time								
5	min	365	410	442	476	492	507	536
10	min	293	319	333	347	352	360	369
15	min	219	233	242	251	253	258	265
30	min	124	132	138	142	144	145	147
60	min	87.4	90.7	92.7	94.6	95.6	96.5	97.6
120	min	50.3	52.0	52.7	53.3	53.6	53.9	54.4
180	min	34.3	35.5	36.6	37.5	37.9	38.4	38.8
240	min	27.4	28.0	28.5	29.1	29.4	29.9	30.3
300	min	24.2	24.9	25.5	26.2	26.4	26.7	27.3
600	min	14.4	14.8	15.0	15.2	15.3	15.4	15.5
1200	min	7.32	7.41	7.64	7.75	7.84	7.93	8.10

- Discharge Rates in Amperes to Various End Voltages at 25 (77 )

End Voltage		1.85V	1.80V	1.75V	1.70V	1.67V	1.65V	1.60V
Time								
5	min	37.3	41.4	44.4	47.5	48.9	50.3	53.1
10	min	26.4	28.7	30.0	31.2	31.7	32.4	33.2
15	min	19.6	20.9	21.6	22.4	22.7	23.0	23.7
30	min	11.3	11.9	12.5	12.8	12.9	13.1	13.3
60	min	7.76	7.95	8.07	8.18	8.23	8.29	8.37
120	min	4.05	4.20	4.31	4.40	4.43	4.46	4.51
180	min	2.78	2.97	3.04	3.10	3.13	3.16	3.20
240	min	2.25	2.30	2.34	2.39	2.42	2.45	2.48
300	min	1.93	2.04	2.10	2.16	2.18	2.21	2.25
600	min	1.17	1.20	1.22	1.24	1.25	1.26	1.27
1200	min	0.599	0.606	0.625	0.634	0.641	0.649	0.663

All data on the spec. sheet is an average value:

The tolerance range : X<6min(+15%~-15%), 6min X<10min(+12%~-12%), 10min X < 60min(+8%~-8%), X 60min(+5%~-5%)