

## WP3-12 12Volt 3Ah

### Specifications

Nominal Voltage(V) **12V**

#### Nominal Capacity

|              |                    |               |
|--------------|--------------------|---------------|
| 20 hour rate | (0.15A to 10.50V)  | <b>3Ah</b>    |
| 10 hour rate | (0.285A to 10.50V) | <b>2.85Ah</b> |
| 5 hour rate  | (0.51A to 10.20V)  | <b>2.55Ah</b> |
| 1 C          | (3A to 9.60V)      | <b>1.6Ah</b>  |
| 3 C          | (9A to 9.60V)      | <b>1.05Ah</b> |

Weight **Approx. 1.3kg(2.86Lbs.)**

Internal Resistance (at 1KHz) **Approx. 45 mΩ**

#### Maximum Discharge Current for

5 seconds: **45A**

#### Charging Methods at 25 (77 )

##### Cycle use:

Charging Voltage **14.4 to 15.0V**

Coefficient -5.0mv/ /cell

Maximum Charging Current : **0.9A**

##### Standby use:

Float Charging Voltage **13.50 to 13.80V**

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**

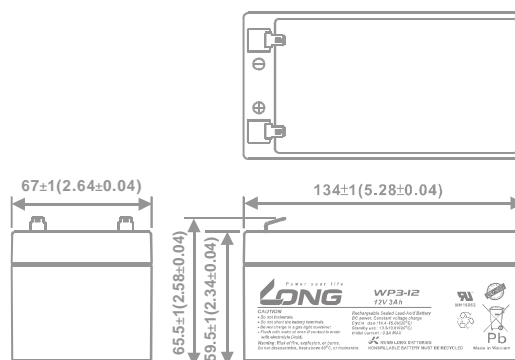
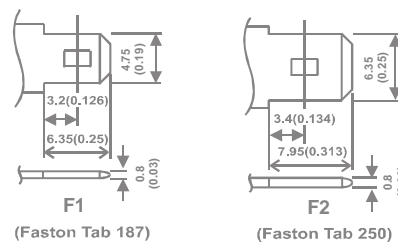
(Option: UL94 HB & UL94 V-0 flame retardant )

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

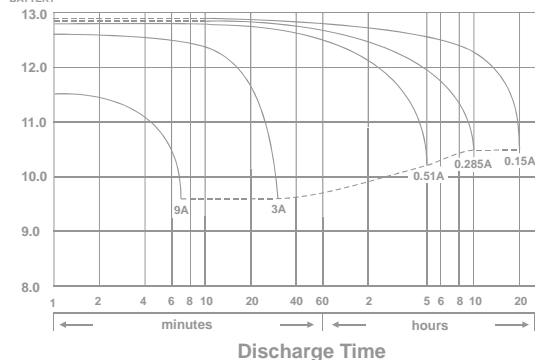


### Dimensions

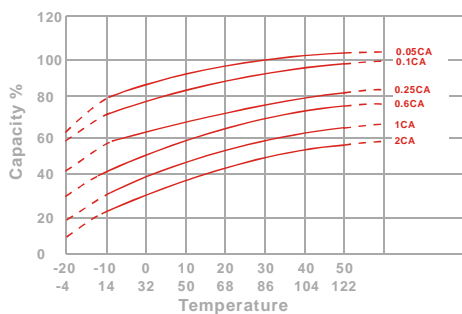
mm(inch)



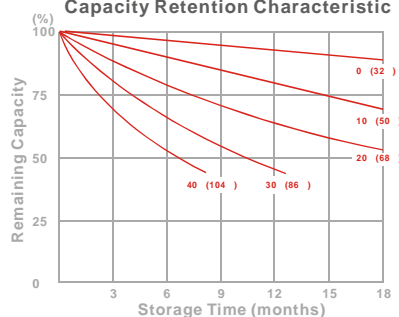
(v) FOR 12V BATTERY Discharge Time VS. Discharge Current (25 )



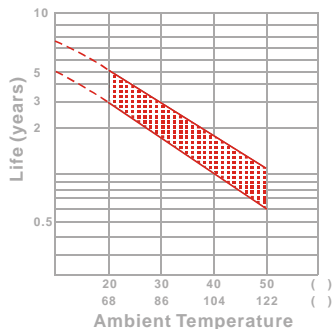
Effect of Temperature on Capacity 25 (77 )



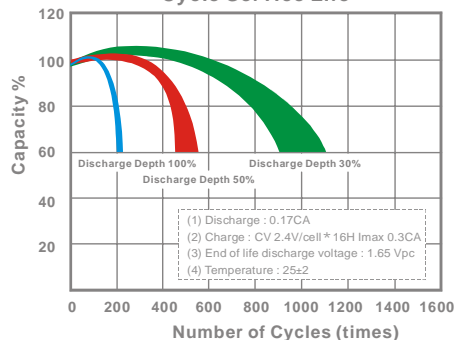
Capacity Retention Characteristic



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 | 94.2  | 106   | 114   | 121   | 125   | 128   | 132   |
| 10          | min | 68.1  | 74.7  | 80.1  | 84.1  | 86.2  | 87.9  | 90.0  |
| 15          | min | 51.8  | 57.6  | 60.5  | 63.7  | 65.3  | 67.0  | 69.1  |
| 30          | min | 30.2  | 33.1  | 34.9  | 37.1  | 37.9  | 38.6  | 39.2  |
| 60          | min | 17.3  | 19.2  | 20.6  | 21.8  | 22.4  | 22.8  | 23.3  |
| 120         | min | 10.2  | 11.1  | 11.9  | 12.7  | 13.1  | 13.5  | 14.1  |
| 180         | min | 7.62  | 8.73  | 9.34  | 9.76  | 9.94  | 10.2  | 10.6  |
| 240         | min | 5.81  | 6.53  | 7.02  | 7.26  | 7.39  | 7.61  | 7.95  |
| 300         | min | 4.94  | 5.55  | 5.97  | 6.17  | 6.28  | 6.41  | 6.62  |
| 600         | min | 3.28  | 3.49  | 3.58  | 3.65  | 3.69  | 3.72  | 3.77  |
| 1200        | min | 1.79  | 1.85  | 1.90  | 1.92  | 1.93  | 1.95  | 1.98  |

- 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 | 7.95  | 9.24  | 10.3  | 11.1  | 11.5  | 12.0  | 12.6  |
| 10          | min | 5.87  | 6.52  | 7.07  | 7.46  | 7.62  | 7.79  | 8.08  |
| 15          | min | 4.49  | 5.03  | 5.37  | 5.71  | 5.86  | 6.02  | 6.23  |
| 30          | min | 2.56  | 2.87  | 3.03  | 3.10  | 3.12  | 3.14  | 3.17  |
| 60          | min | 1.54  | 1.72  | 1.81  | 1.88  | 1.92  | 1.94  | 1.99  |
| 120         | min | 0.945 | 0.993 | 1.04  | 1.08  | 1.10  | 1.12  | 1.15  |
| 180         | min | 0.679 | 0.718 | 0.752 | 0.786 | 0.807 | 0.826 | 0.861 |
| 240         | min | 0.556 | 0.581 | 0.604 | 0.625 | 0.634 | 0.646 | 0.663 |
| 300         | min | 0.472 | 0.493 | 0.511 | 0.526 | 0.533 | 0.542 | 0.554 |
| 600         | min | 0.273 | 0.289 | 0.301 | 0.306 | 0.308 | 0.311 | 0.313 |
| 1200        | min | 0.147 | 0.154 | 0.158 | 0.161 | 0.163 | 0.165 | 0.167 |

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%)