

# USL120090-2 12V 9Ah

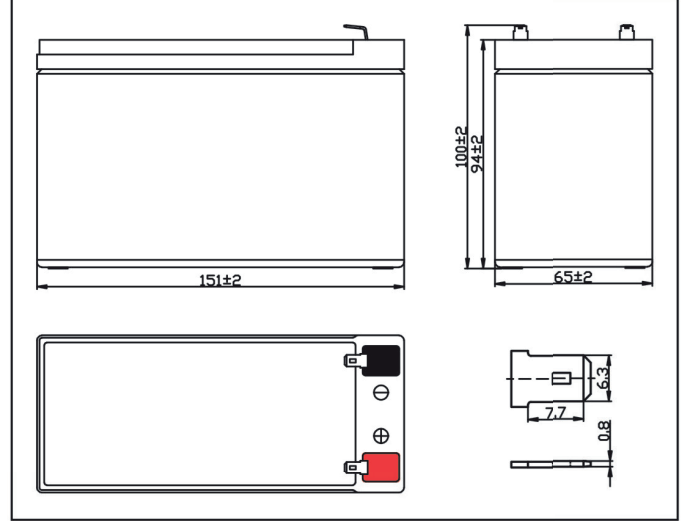
3-5 Years Design Life



Container Color  
 ■ Black C  
 ■ Grey 3 C

## Plane Chart:

Unit:(mm) Terminal type:(F2)

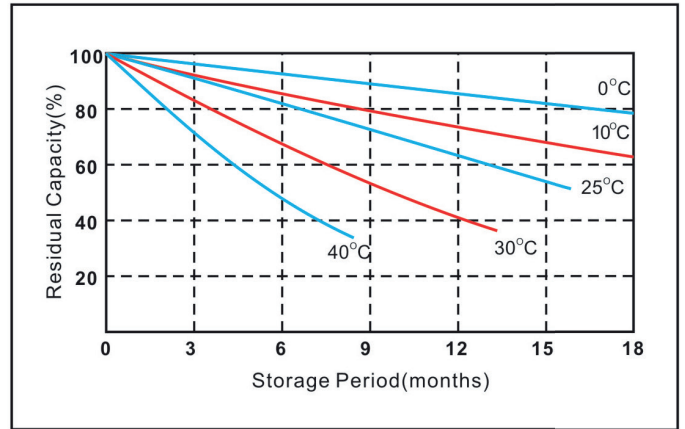


## Parameter Chart:

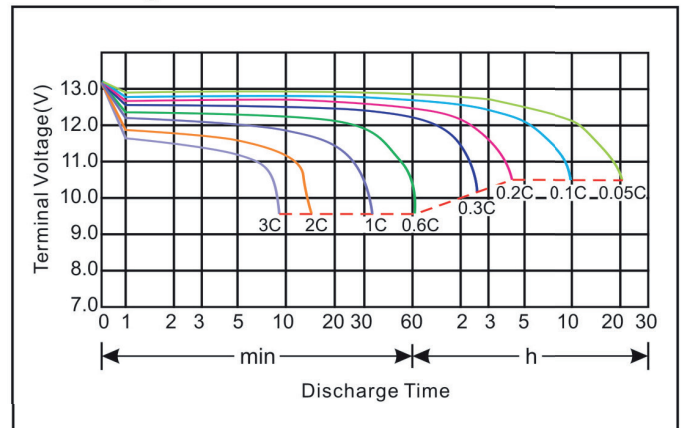
| Volts                            |                                    | 12V                                                           |  |
|----------------------------------|------------------------------------|---------------------------------------------------------------|--|
| Capacity(25°C)                   | 20 hours rate (0.45A)              | 9Ah                                                           |  |
| Discharge Current Testing (25°C) | 20 I <sub>20</sub> rate (9A,27min) | 34min                                                         |  |
|                                  | 60 I <sub>20</sub> rate (27A,7min) | 8min                                                          |  |
| Internal Resistance              | Full Charged Battery 25°C          | 18mΩ                                                          |  |
| Capacity Affected By Temperature | 40°C                               | 104%                                                          |  |
|                                  | 25°C                               | 100%                                                          |  |
|                                  | 0°C                                | 83%                                                           |  |
|                                  | -15°C                              | 65%                                                           |  |
| Residual Capacity (25°C)         | Capacity After 3 Months Storage    | 91%                                                           |  |
|                                  | Capacity After 6 Months Storage    | 82%                                                           |  |
|                                  | Capacity After 12 Months Storage   | 65%                                                           |  |
| Charge (Constant Voltage)        | Cycle (25°C)                       | Initial Charging Current Less Than 2.7A<br>Voltage 14.5~14.9V |  |
|                                  | Float (25°C)                       | Charge Voltage 13.6~13.8V                                     |  |
| Weight (Approx)                  |                                    | 2.40Kg                                                        |  |

★The above are average and data obtained from the first 3 charge/discharge cycles. These are not minimum values.

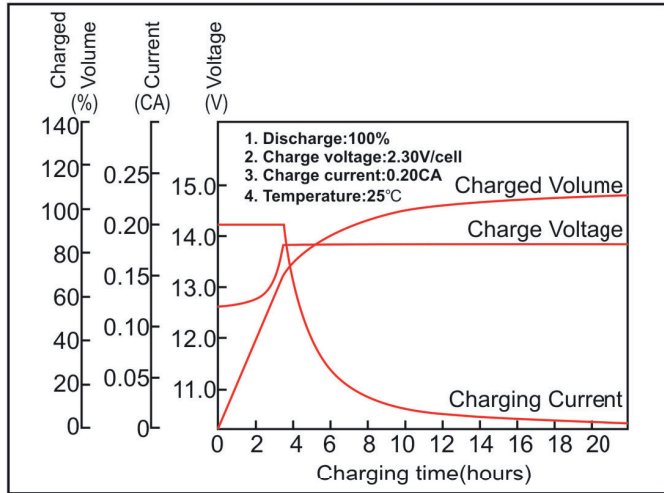
## Residual Capacity



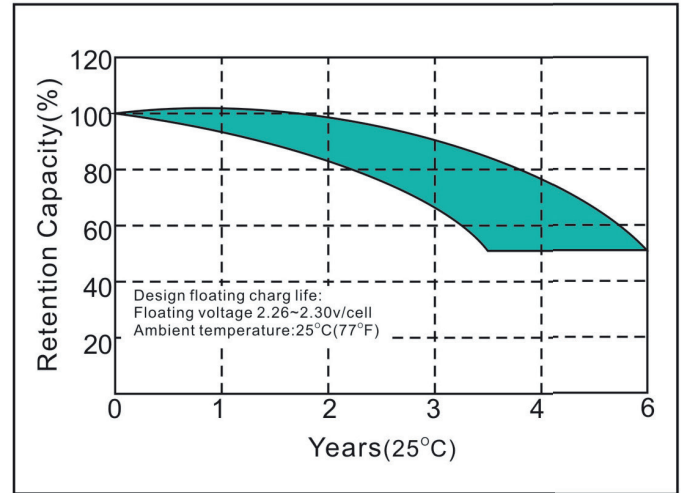
## Discharge Current 25°C



## Constant voltage charging characteristics



## Float Life



## Constant Current Discharge Characteristics (A, 25°C)

| F.V/Time | 5min | 10min | 15min | 30min | 60min | 2h   | 3h   | 5h   | 8h   | 10h  | 20h  |
|----------|------|-------|-------|-------|-------|------|------|------|------|------|------|
| 9.60V    | 38.2 | 23.8  | 18.2  | 10.3  | 5.81  | 3.26 | 2.35 | 1.51 | 1.00 | 0.81 | 0.46 |
| 10.2V    | 34.6 | 22.7  | 17.1  | 10.0  | 5.69  | 3.17 | 2.32 | 1.49 | 0.99 | 0.80 | 0.45 |
| 10.5V    | 33.2 | 21.6  | 16.6  | 9.7   | 5.56  | 3.12 | 2.28 | 1.48 | 0.98 | 0.79 | 0.45 |
| 10.8V    | 31.3 | 20.3  | 16.1  | 9.5   | 5.47  | 3.07 | 2.25 | 1.46 | 0.97 | 0.78 | 0.43 |

## Constant Current Discharge Characteristics (Watt, 25°C)

| F.V/Time | 5min  | 10min | 15min | 30min | 60min | 2h   | 3h   | 5h    | 8h    | 10h  | 20h  |
|----------|-------|-------|-------|-------|-------|------|------|-------|-------|------|------|
| 9.60V    | 412.6 | 259.4 | 200.2 | 115.4 | 66.3  | 37.5 | 27.3 | 17.70 | 11.82 | 9.56 | 5.37 |
| 10.2V    | 380.6 | 252.0 | 191.5 | 113.0 | 64.9  | 36.5 | 26.9 | 17.47 | 11.71 | 9.44 | 5.24 |
| 10.5V    | 368.5 | 241.9 | 187.6 | 110.6 | 63.9  | 36.5 | 26.7 | 17.50 | 11.69 | 9.40 | 5.12 |
| 10.8V    | 350.6 | 229.4 | 183.5 | 109.3 | 62.9  | 35.9 | 26.3 | 17.26 | 11.54 | 9.28 | 5.12 |

## Capacity Factors With Different Temperature

| Battery Type |     | -20°C | -10°C | 0°C | 5°C | 10°C | 20°C | 25°C | 30°C | 40°C | 45°C |
|--------------|-----|-------|-------|-----|-----|------|------|------|------|------|------|
| Battery      | 12V | 50%   | 70%   | 83% | 85% | 90%  | 98%  | 100% | 102% | 104% | 105% |

★The above are average and data obtained from the first 3 charge/discharge cycles. These are not minimum values.

