

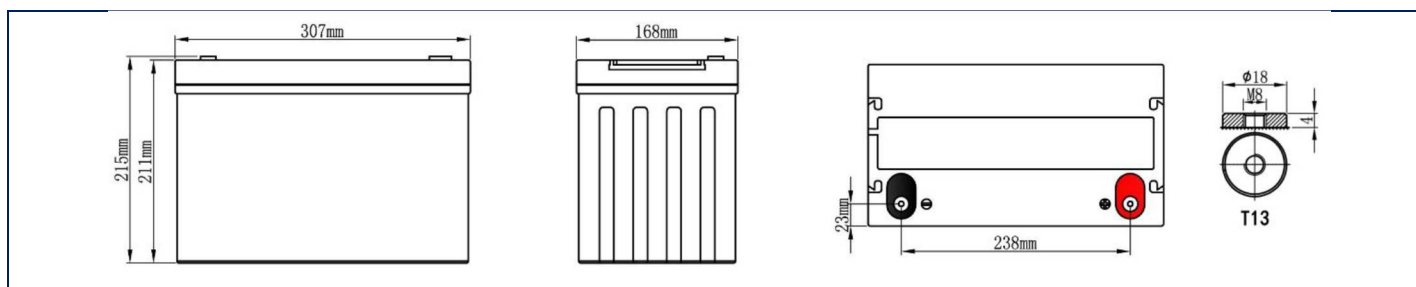


# DATASHEET SLC 100-12S

**12V 100AH**
**AGM SEALED VRLA BATTERY**
**LONG LIFE 10-12 YEARS OF EXPECTED LIFETIME**
**(EUROBAT)**

## SPECIFICATIONS

| Nominal Voltage | Nominal Capacity | Dimension<br>±3mm |       |       |       | Weight<br>±2% | Max Discharge Current<br>(5s) | Internal Resistance | Standard Terminal | Container Material |
|-----------------|------------------|-------------------|-------|-------|-------|---------------|-------------------------------|---------------------|-------------------|--------------------|
|                 |                  | L                 | W     | H     | TH    |               |                               |                     |                   |                    |
| 12V             | 100AH            | 307mm             | 168mm | 211mm | 215mm | 26,5kg        | 1.100A                        | ≈5.8 mΩ             | M8                | ABS                |



## CONSTANT-VOLTAGE CHARGE

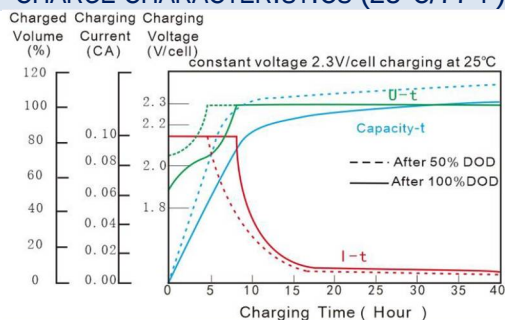
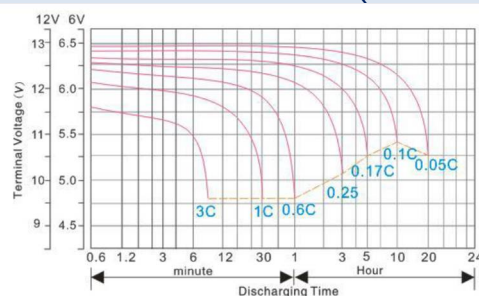
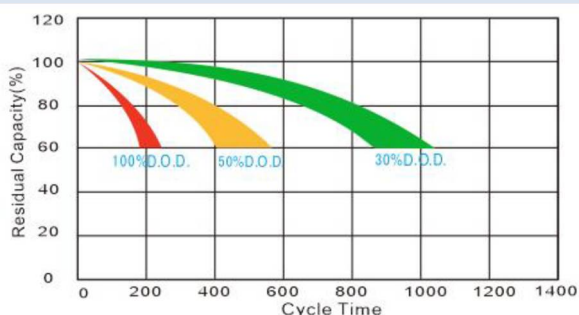
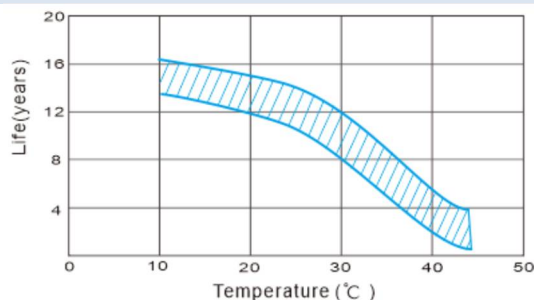
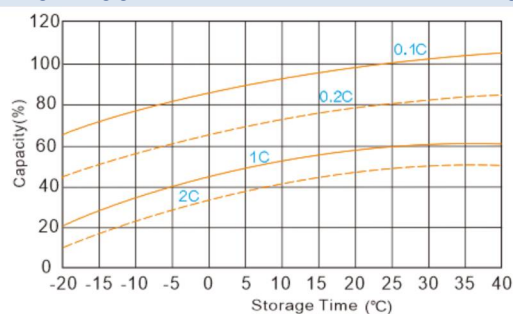
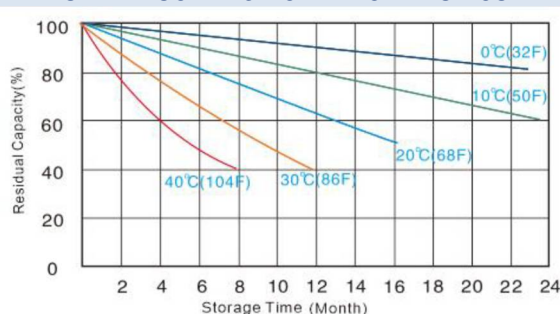
| Rated Capacity                   |         |
|----------------------------------|---------|
| 20 hour rate (5.0A)              | 100.0AH |
| 10 hour rate (9.6A)              | 96.0AH  |
| 5 hour rate (16.5A)              | 82.5AH  |
| 3 hour rate (24.4A)              | 73.2AH  |
| 1 hour rate (60.0A)              | 60.0AH  |
| Capacity affected by temperature |         |
| 40°C (104°F)                     | 103%    |
| 25°C (77°F)                      | 100%    |
| 0°C (32°F)                       | 86%     |

| Cycle Application                                                                                                                                                                                                                |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Limit initial current less than 22.5A.                                                                                                                                                                                        |
| 2. Charge until battery voltage (under charge) reaches 14.1V to 14.4V at 25°C(77°F).                                                                                                                                             |
| 3. Hold at 14.1V to 14.4V until current drop to under 0.54A for at least 3 hours.                                                                                                                                                |
| 4. Temperature compensation coefficient of charging voltage is -30mV/°C.                                                                                                                                                         |
| Standby Service                                                                                                                                                                                                                  |
| 1. Hold battery across constant voltage source of 13.6 to 13.8 volts with current limit 22.5A continuously. When held at this voltage, the battery will seek its own current level and maintain itself in a fully charge status. |
| 2. Temperature compensation coefficient of charging voltage is -18mV/°C.                                                                                                                                                         |

| Nominal Operating Temp. Range |
|-------------------------------|
| 25±3°C (77±5°F)               |

| Operating Temperature |                |                   |
|-----------------------|----------------|-------------------|
| Discharge: -15÷50°C   | Charge: 0÷40°C | Storage: -15÷40°C |

NOTE : The battery should be charged within 6 months of storage, Otherwise, permanent loss of capacity might occur as a result of sulfation

**CHARGE CHARACTERISTICS (25°C/77°F)**

**DISCHARGE CHARACTERISTIC (25°C/77°F)**

**CYCLE LIFE IN RELATION TO DEPTH OF DISCHARGE**

**TEMPERATURE VS FLOAT LIFE**

**CAPACITY CURVE AT DIFFERENT TEMPERATURE**

**SELF DISCHARGE CHARACTERISTICS**

**Constant Current Discharge (Amperes) at 25°C (77°F)**

| End Voltage (V) | 10 min | 15 min | 30 min | 45 min | 1 h | 1,5 h | 2 h  | 3 h  | 5 h  | 8 h   | 10 h | 20 h |
|-----------------|--------|--------|--------|--------|-----|-------|------|------|------|-------|------|------|
| 9.6V            | 221    | 175    | 98     | 85     | 58  | 45.5  | 38.5 | 23.6 | 16.5 | 11.31 | 9.46 | 4.92 |
| 9.9V            | 211    | 167    | 94     | 82     | 57  | 44.5  | 37.5 | 23.2 | 16.1 | 11.11 | 9.36 | 4.87 |
| 10.2V           | 201    | 159    | 89     | 79     | 55  | 43.6  | 36.6 | 22.7 | 15.8 | 10.91 | 9.27 | 4.82 |
| 10.5V           | 191    | 150    | 85     | 77     | 54  | 42.7  | 35.8 | 22.3 | 15.5 | 10.61 | 9.18 | 4.78 |
| 10.8V           | 182    | 143    | 81     | 74     | 53  | 41.8  | 34.8 | 21.8 | 15.0 | 10.50 | 9.09 | 4.73 |

**Constant Power Discharge (Watts) at 25°C (77°F)**

| End Voltage (V) | 10 min | 15 min | 30 min | 45 min | 1 h | 1,5 h | 2 h | 3 h | 5 h | 8 h | 10 h | 20 h |
|-----------------|--------|--------|--------|--------|-----|-------|-----|-----|-----|-----|------|------|
| 9.6V            | 2467   | 2044   | 1266   | 887    | 737 | 538   | 403 | 300 | 194 | 146 | 113  | 61.0 |
| 9.9V            | 2350   | 1947   | 1205   | 856    | 720 | 524   | 393 | 293 | 189 | 143 | 112  | 60.5 |
| 10.2V           | 2238   | 1854   | 1147   | 828    | 702 | 512   | 383 | 286 | 185 | 141 | 111  | 59.8 |
| 10.5V           | 2132   | 1766   | 1093   | 800    | 685 | 499   | 374 | 278 | 180 | 138 | 110  | 59.2 |
| 10.8V           | 2030   | 1682   | 1041   | 773    | 669 | 487   | 365 | 272 | 176 | 135 | 109  | 58.7 |