

GEL Series Battery

GE series batteries are designed with AGM separator and GEL deep cycle technology to give Extra-durable cyclic performance at extreme temperature.
GE series Batteries are designed for 12 years life time floating design life at 25 °C .
Meet with IEC, BS,JIS and Eurobat standard .

Application

- * Emergency Power System
- * Communication equipment
- * Telecommunication systems
- * Uninterruptible power supplies
- * Electric toy car and wheelchairs, etc.
- * Power tools
- * Alarm system
- * Marine equipment
- * Medical equipment
- * Fire and Security System



General Features

- * Safety Sealing
- * Non-spillable construction
- * High Reliability and Stability
- * Sealed and Maintenance-free
- * Safety and Quality certification
- * Long Life and low self-discharge design

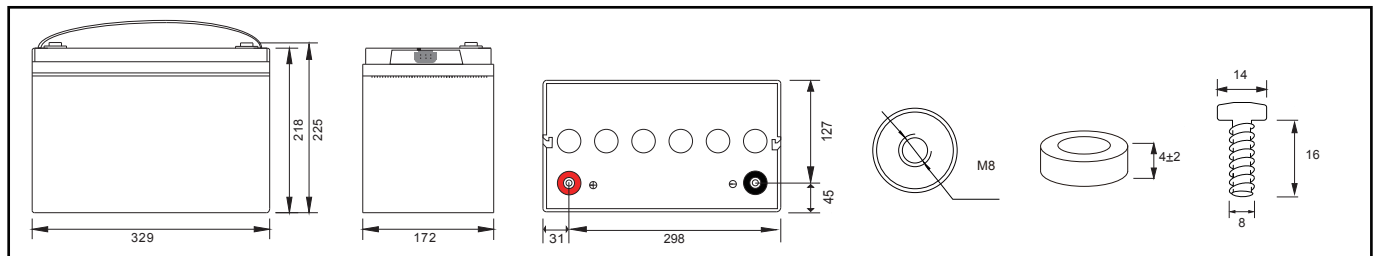
Construction

- * Positive Lead dioxide
- * Electrolyte Sulfuric acid thixotropic Gel
- * Separator Macromolecule polymer
- * Container ABS(UL94-HB), Flammability Resistance of UL94-V2 can be available upon request
- * Negative Lead
- * Safety Valve EPDR
- * Terminal Copper

Specification

| | | | | |
|-----------------------------------|---|---------------------------|--------------------------|-------------------------|
| Battery Model | Nominal Voltage | | 12V | |
| | Rated capacity (10 Hour rate) | | 100Ah | |
| | Cells Per battery | | 6 | |
| Dimension | Length | Width | Height | Total Height |
| | 329mm (12.79 inches) | 172mm (6.77 inches) | 218mm (8.58 inches) | 225mm (8.85 inches) |
| Approx Weight | 29.0kg(63.93lbs) ± 3% | | | |
| Capacity @ 25°C (77°F) | 10 hour rate(10A,10.5V) | 5 hour rate(17.79A,10.5V) | 3 hour rate(25.8A,10.8V) | 1 hour rate(55.5A,9.6V) |
| | 100Ah | 88.95Ah | 77.4Ah | 55.5Ah |
| Max.discharge current | 1000 A (5 Sec.) | | | |
| Internal Resistance | Full charged at 25°C (77°F) : Approx 3.5mΩ | | | |
| Capacity affected by Temp.(10 HR) | 40°C (104°F) | 25°C (77°F) | 0°C (32°F) | -15°C (5°F) |
| | 102% | 100% | 85% | 65% |
| Self Discharge @25°C (77°F) | After 3 months storage | | After 6 months storage | After 12 months storage |
| | 91% | | 82% | 64% |
| Charge method @25°C (77°F) | Cycle Use | | Float Use | |
| | 14.40-15.00V (Initial charging current less than 30A) | | 13.60-13.80V | |

Outer dimension (mm)

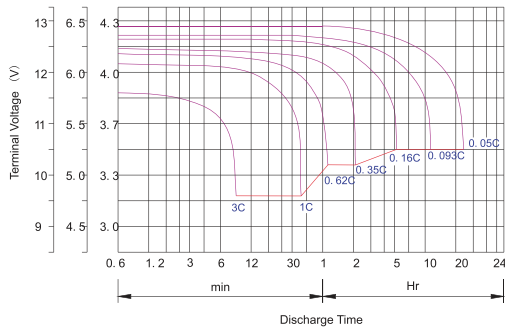


Terminal Type (mm)

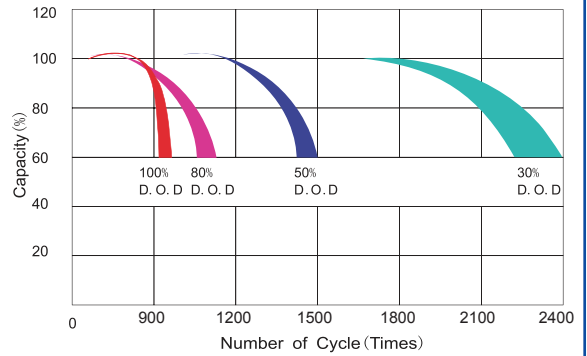
| Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C (77°F) | | | | | | | | | | |
|---|---------|---------|---------|--------|--------|--------|--------|--------|--------|--------|
| F.V/time | 15MIN | 30MIN | 60MIN | 90MIN | 2HR | 3HR | 5HR | 8HR | 10HR | 20HR |
| 1.60V | 170.000 | 102.600 | 55.500 | 40.620 | 37.018 | 26.369 | 17.995 | 12.742 | 10.376 | 5.725 |
| | 328.100 | 204.379 | 110.723 | 81.105 | 74.066 | 52.759 | 36.006 | 25.494 | 20.761 | 11.455 |
| 1.67V | 161.169 | 100.408 | 55.098 | 40.217 | 36.833 | 26.230 | 17.896 | 12.634 | 10.215 | 5.439 |
| | 311.299 | 200.113 | 109.928 | 80.322 | 73.759 | 52.578 | 35.872 | 25.332 | 20.481 | 10.905 |
| 1.70V | 157.195 | 99.531 | 54.696 | 40.177 | 36.741 | 26.164 | 17.892 | 12.508 | 10.086 | 5.294 |
| | 303.858 | 198.371 | 109.257 | 80.274 | 73.605 | 52.459 | 35.873 | 25.091 | 20.233 | 10.620 |
| 1.75V | 150.571 | 97.777 | 53.891 | 39.654 | 36.511 | 26.000 | 17.797 | 12.473 | 10.000 | 5.210 |
| | 291.356 | 195.018 | 107.917 | 79.309 | 73.131 | 52.156 | 35.701 | 25.040 | 20.075 | 10.459 |
| 1.80V | 144.390 | 95.585 | 53.489 | 39.373 | 36.280 | 25.862 | 17.747 | 12.366 | 9.839 | 5.038 |
| | 279.827 | 190.731 | 107.246 | 78.943 | 72.683 | 51.904 | 35.619 | 24.842 | 19.766 | 10.122 |
| 1.85V | 136.883 | 92.954 | 52.685 | 38.930 | 35.957 | 25.631 | 17.648 | 12.204 | 9.677 | 4.866 |
| | 265.553 | 185.615 | 105.791 | 78.250 | 72.069 | 51.493 | 35.455 | 24.543 | 19.461 | 9.786 |

Note: The above datas are average values. (Edition 2020-05)

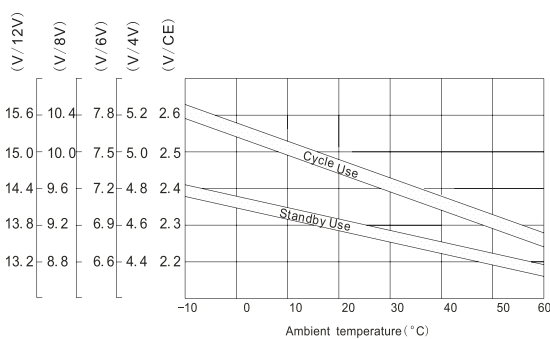
Discharge characteristic Curve



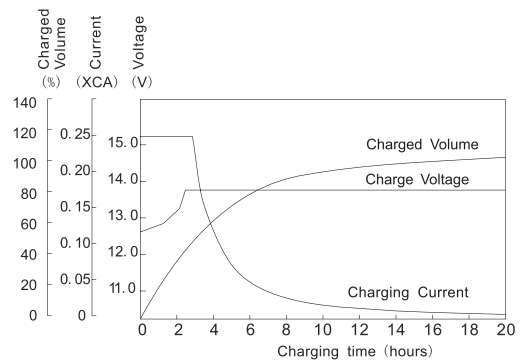
Cycle service life in relation to depth of discharge



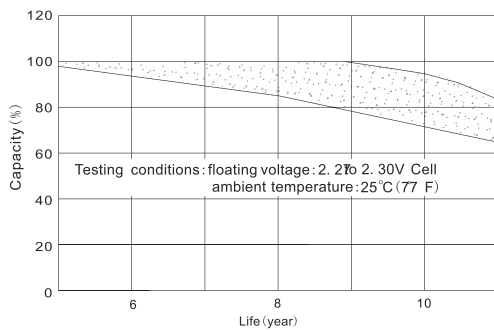
Relationship between charging voltage and temperature



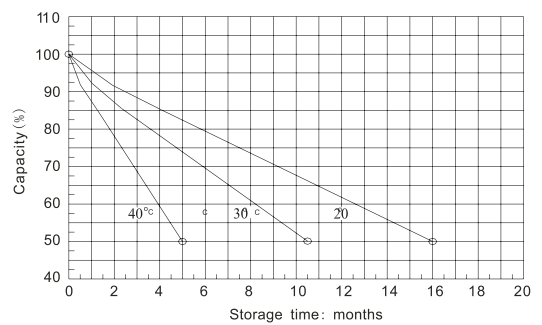
Constant voltage charging characteristic (0.25CA, at 25°C)



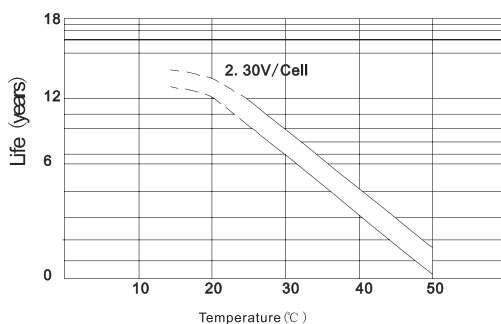
Life characteristics of standby use



Self-discharge characteristic



Temperature effects on float life



Charge characteristic Curve for standby use

