

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

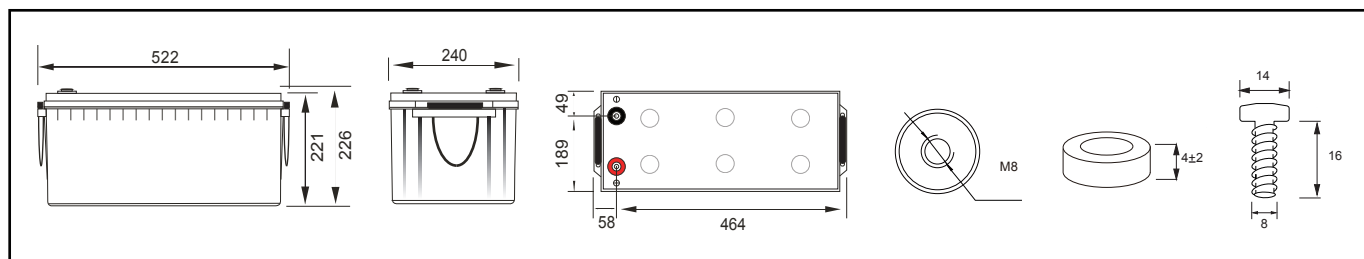
Construction

- * 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) | | 200Ah | |
| | Cells Per battery | | 6 | |
| Dimension | Length | Width | Height | Total Height |
| | 522mm (20.55 inches) | 240mm (9.44 inches) | 221mm (8.70 inches) | 226mm (8.89 inches) |
| Approx Weight | 57kg(125.66lbs) ± 3% | | | |
| Capacity @ 25°C (77°F) | 10 hour rate(20A,10.5V) | 5 hour rate(36.62A,10.5V) | 3 hour rate(53.21A,10.8V) | 1 hour rate(115A,9.6V) |
| | 200Ah | 183.1Ah | 159.63Ah | 115Ah |
| Max.discharge current | 1800A (5 Sec.) | | | |
| Internal Resistance | Full charged at 25°C (77°F) : Approx 2.3mΩ | | | |
| 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 60A) | | 13.60-13.80V | |

Outer dimension (mm)

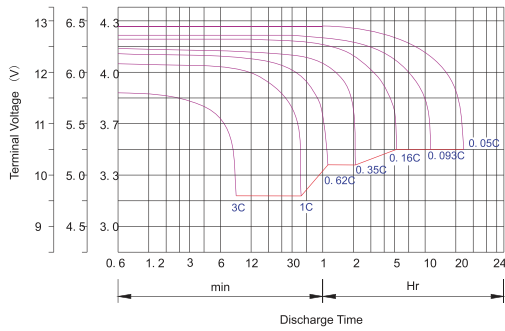


Terminal Type (mm)

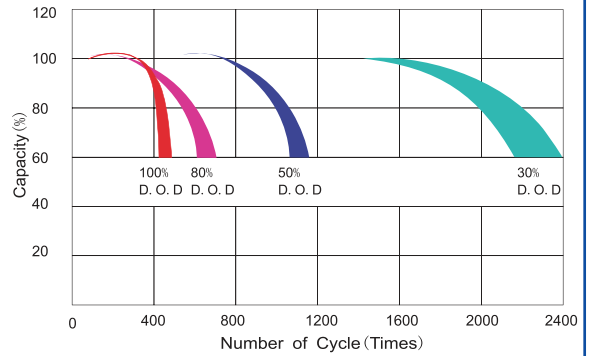
| Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C (77°F) | | | | | | | | | | |
|---|---------|---------|---------|---------|---------|---------|--------|--------|--------|--------|
| F.V/time | 15MIN | 30MIN | 60MIN | 90MIN | 2HR | 3HR | 5HR | 8HR | 10HR | 20HR |
| 1.60V | 346.600 | 209.800 | 115.000 | 84.167 | 76.171 | 54.259 | 37.029 | 25.484 | 20.753 | 11.538 |
| | 668.938 | 417.922 | 229.425 | 168.056 | 152.405 | 108.563 | 74.088 | 50.989 | 41.523 | 23.087 |
| 1.67V | 328.595 | 205.317 | 114.167 | 83.333 | 75.792 | 53.974 | 36.825 | 25.269 | 20.430 | 10.962 |
| | 634.683 | 409.197 | 227.778 | 166.433 | 151.773 | 108.188 | 73.813 | 50.664 | 40.962 | 21.978 |
| 1.70V | 320.492 | 203.524 | 113.333 | 83.250 | 75.602 | 53.838 | 36.816 | 25.016 | 20.172 | 10.669 |
| | 619.512 | 405.636 | 226.389 | 166.334 | 151.457 | 107.945 | 73.815 | 50.182 | 40.466 | 21.403 |
| 1.75V | 306.989 | 199.938 | 111.667 | 82.167 | 75.128 | 53.500 | 36.621 | 24.946 | 20.000 | 10.500 |
| | 594.023 | 398.779 | 223.611 | 164.333 | 150.481 | 107.321 | 73.461 | 50.080 | 40.150 | 21.079 |
| 1.80V | 294.385 | 195.455 | 110.833 | 81.583 | 74.653 | 53.215 | 36.519 | 24.731 | 19.677 | 10.154 |
| | 570.518 | 390.013 | 222.222 | 163.575 | 149.560 | 106.803 | 73.293 | 49.685 | 39.532 | 20.399 |
| 1.85V | 279.081 | 190.075 | 109.167 | 80.667 | 73.989 | 52.741 | 36.315 | 24.409 | 19.355 | 9.808 |
| | 541.416 | 379.553 | 219.207 | 162.140 | 148.295 | 105.957 | 72.956 | 49.086 | 38.923 | 19.723 |

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

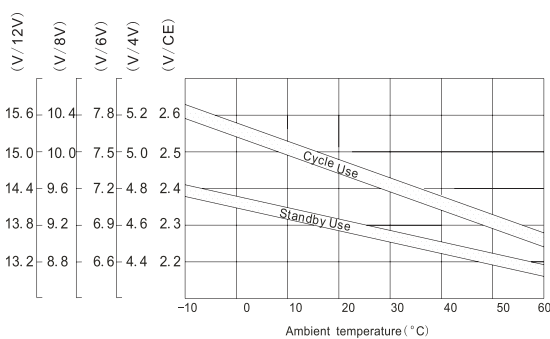
Discharge characteristic Curve



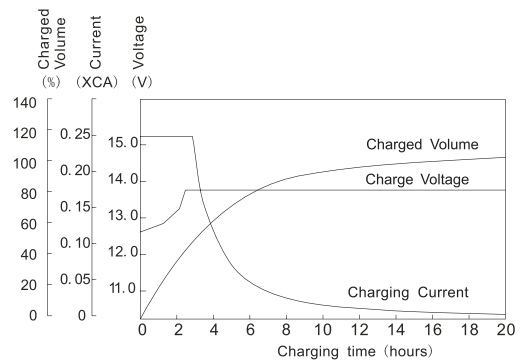
Cycle service life in relation to depth of discharge



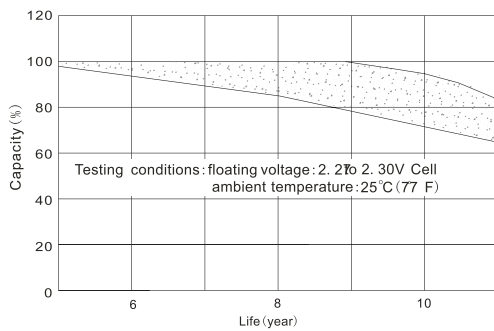
Relationship between charging voltage and temperature



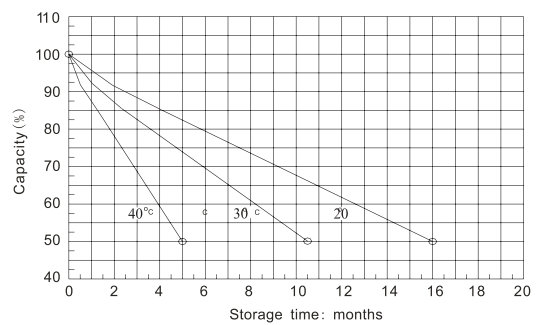
Constant voltage charging characteristic (0.25CA, at 25°C)



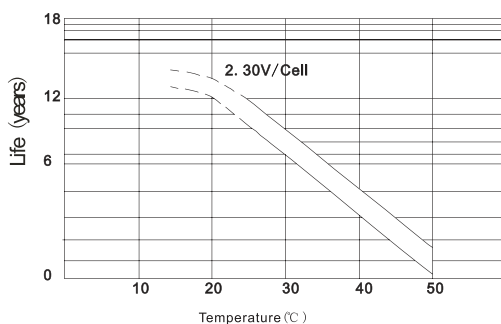
Life characteristics of standby use



Self-discharge characteristic



Temperature effects on float life



Charge characteristic Curve for standby use

