

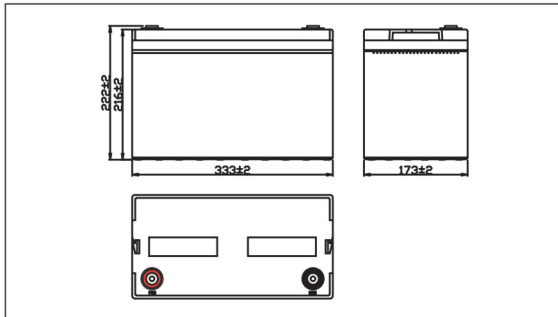
BL 12-100(GEL)



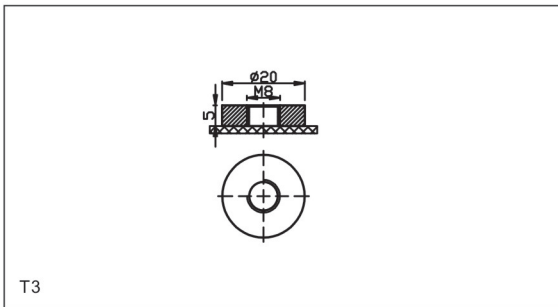
► Specifications

| | | |
|-------------------------------|--------------|-----------------------|
| Nominal Voltage | | 12V |
| Rated capacity (10 hour rate) | | 100Ah |
| Dimensions | Length | 333± 1.5mm(13.11inch) |
| | Width | 173± 1mm(6.81inch) |
| | Height | 216± 1mm(8.50inch) |
| | Total Height | 222± 1mm(8.74inch) |
| Approx. Weight | | 30.5kg(67.24lbs)± 4% |

► Outer Diemensions (mm)



► Terminal Type (mm)



► Characteristics

| | | |
|--|-------------|---|
| Capacity (25°C) | 20HR(10.5V) | 104Ah |
| | 10HR(10.5V) | 100Ah |
| | 1HR(9.60V) | 61.2Ah |
| Terminal type | | T3 |
| Internal resistance (Fully charged,25°C) | | Approx.5m Ω |
| Capacity affected by temperature (20HR) | 40°C | 102% |
| | 25°C | 100% |
| | 0°C | 85% |
| | -15°C | 65% |
| Self-discharge (25°C) | 3 months | Remaining Capacity:91% |
| | 6 months | Remaining Capacity:82% |
| | 12 months | Remaining Capacity:65% |
| Nominal operating temperature | | 25°C± 3°C(77°F ± 5°F) |
| Operating temperature range | Discharge | -15°C~50°C(5°F~122°F) |
| | Charge | -10°C~50°C(14°F~122°F) |
| | Storage | -20°C~50°C(-4°F~122°F) |
| Float charging voltage(25°C) | | 13.50 to 13.80V Temperature compensation: -18mV/°C |
| Cyclic charging voltage(25°C) | | 14.50 to 15.00V Temperature compensation: -30mV/°C |
| Maximum charging current | | 30A |
| Maximum discharge current | | 1000A(5 sec.) |
| Designed floating life(20°C) | | 12 years |

► Construction

| Component | Positive plate | Negative plate | Container | Cover | Separator | Electrolyte | Safety valve | Terminal |
|--------------|----------------|----------------|-----------|-------|-----------|---------------|--------------|----------|
| Raw material | Lead dioxide | Lead | ABS | ABS | AGM | Sulfuric acid | Rubber | Copper |

► Constant Current Discharge Characteristics Unit: A (25°C, 77°F)

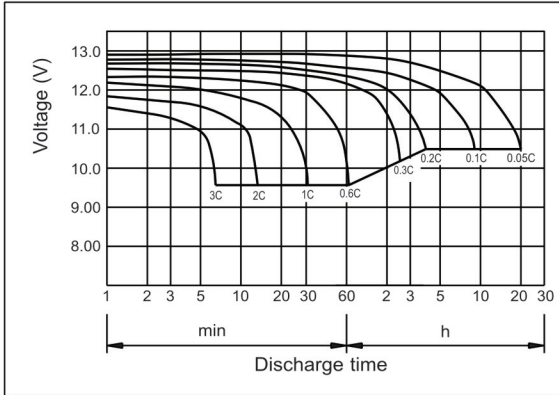
| F.V/Time | 10min | 15min | 30min | 1HR | 2HR | 3HR | 5HR | 8HR | 10HR | 20HR |
|----------|-------|-------|-------|------|------|------|------|------|------|------|
| 9.60V | 217.8 | 172.8 | 106.9 | 61.2 | 36.1 | 26.1 | 18.3 | 12.0 | 10.2 | 5.3 |
| 9.90V | 209.5 | 167.2 | 104.2 | 59.5 | 35.8 | 25.9 | 18.1 | 12.0 | 10.1 | 5.2 |
| 10.2V | 206.9 | 165.6 | 103.0 | 58.6 | 35.6 | 25.7 | 18.0 | 11.9 | 10.1 | 5.2 |
| 10.5V | 196.8 | 160.2 | 100.0 | 57.2 | 35.3 | 25.5 | 17.8 | 11.8 | 10.0 | 5.2 |
| 10.8V | 175.6 | 155.8 | 97.8 | 56.4 | 34.9 | 25.2 | 17.6 | 11.7 | 10.0 | 5.1 |

► Constant Power Discharge Characteristics Unit: W (25°C, 77°F)

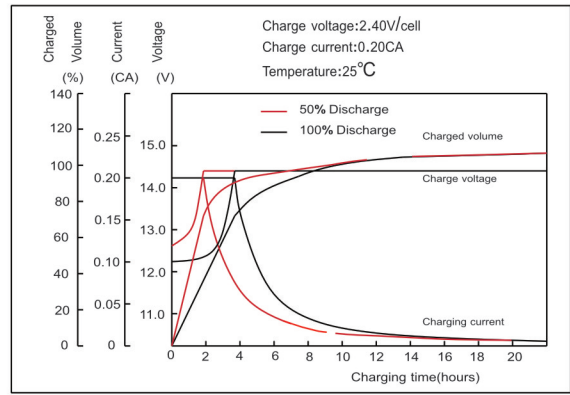
| F.V/Time | 10min | 15min | 30min | 1HR | 2HR | 3HR | 5HR | 8HR | 10HR | 20HR |
|----------|--------|--------|--------|-------|-------|-------|-------|-------|-------|------|
| 9.60V | 2352.2 | 1902.8 | 1199.9 | 733.6 | 418.8 | 306.9 | 216.8 | 144.5 | 121.8 | 64.3 |
| 9.90V | 2340.5 | 1865.6 | 1177.5 | 713.3 | 414.7 | 304.4 | 211.8 | 141.6 | 121.2 | 63.9 |
| 10.2V | 2234.4 | 1826.6 | 1155.3 | 703.9 | 412.8 | 302.9 | 212.9 | 143.9 | 120.8 | 63.6 |
| 10.5V | 2204.2 | 1794.2 | 1149.9 | 657.8 | 408.9 | 300.0 | 209.9 | 143.6 | 119.8 | 63.4 |
| 10.8V | 1984.3 | 1745.0 | 1115.1 | 643.0 | 404.9 | 297.0 | 207.9 | 142.6 | 118.2 | 63.0 |

Note: The above characteristics data can be obtained within three charge or discharge cycle

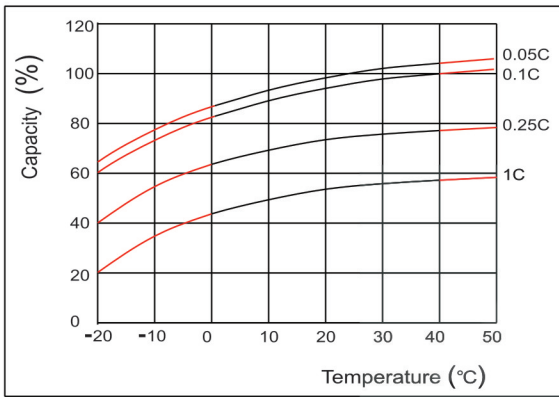
► Discharge Characteristics (25°C)



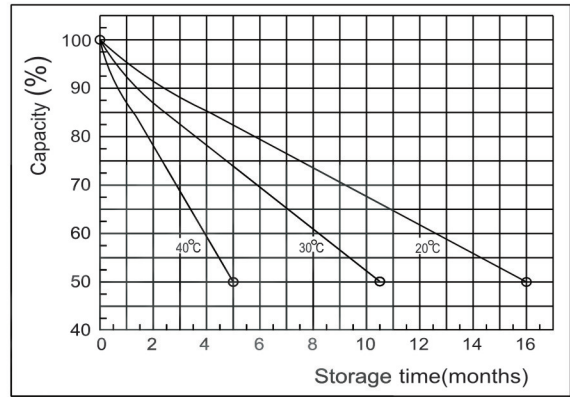
► Charging Characteristics (25°C)



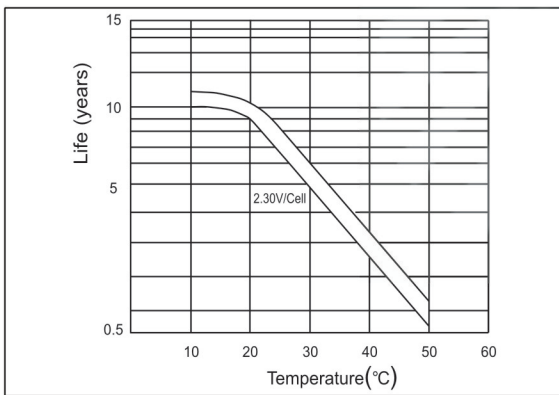
► Temperature effects on Capacity



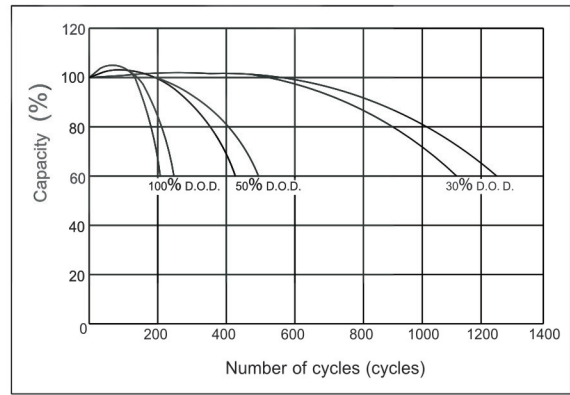
► Self-Discharge Characteristics



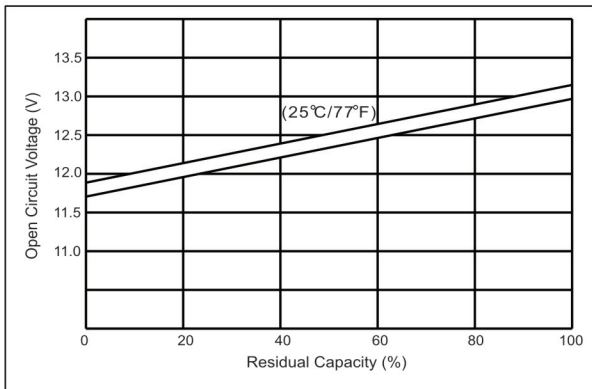
► Floating Life on Temperature



► Cycle Life on D.O.D (25°C)



► The Relationship for OCV and Capacity (25°C)



► The Relationship for Charging Voltage and Temperature

