

MLG12-100 (12V100AH C10 @25°C)



Features

- § Maintenance-free operation
- § Gel technology
- § ABS case, Flame Retardant V0 is available
- § Stable quality and high reliability
- § 12 years design life (at 25°C)

Application

- § Telecommunication system
- § Alarm and security system
- § Backup power
- § Solar & Wind
- § Emergency lighting
- § Auto control system
- § Electronic apparatus and equipment
- § Communication power supply
- § DC power supply

Specification

| | | | | |
|------------------------|-------------------------------------|------------------------------|--|--|
| Nominal Voltage | 12V (6 cells) | Operating Temp.Range | Discharge: -15-50°C (5-122°F) | |
| Nominal Capacity | 106AH (20hr, 1.80V/cell, 25°C/77°F) | | Charge: 0-40°C (32-104°F) | |
| | 100AH (10hr, 1.80V/cell, 25°C/77°F) | Storage: -15-40°C (5-104°F) | | |
| | 85AH (5hr, 1.75V/cell, 25°C/77°F) | Nominal Operating Temp.Range | 25 ± 3°C (77 ± 5°F) | |
| | 60AH (1hr, 1.60V/cell, 25°C/77°F) | Cycle Use | 14.4~14.8V (25°C/77°F) Temp.Coefficient -30mV/°C | |
| Dimension | Length | 329 ± 2mm | Standby Use | Initial Charging Current Less than 30A |
| | Width | 172 ± 2mm | | 13.5~13.8V (25°C/77°F) Temp.Coefficient -20mV/°C |
| | Container Height | 214 ± 2mm | Capacity affected by Temperature | No limit on Initial Charging Current |
| | Total Height(with Terminal) | 220 ± 2mm | | 40°C (104°F) 103% |
| Approx Weight | Approx 29.5Kg | Self Discharge | 25°C (77°F) 100% | |
| Terminal | T5 or F7 | | 0°C (32°F) 86% | |
| Container Material | ABS | | MLG series batteries may be stored for up to 6 months | |
| Max. Discharge Current | 1000A (5S) | | at 25°C (77°F) and then a freshening charge is required. | |
| Internal Resistance | Approx 5.0mΩ | | For higher temperatures the time interval will be shorter. | |

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

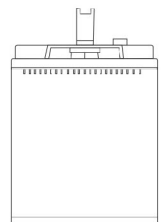
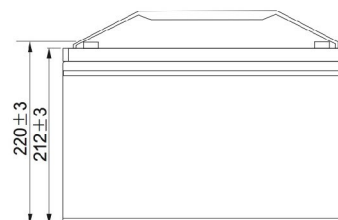
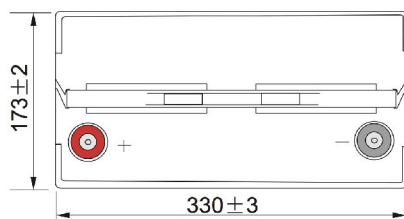
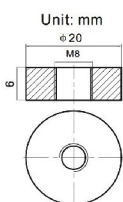
| F.V/Time | 5min | 10min | 15min | 30min | 45min | 1h | 2h | 3h | 5h | 10h | 20h |
|------------|-------|-------|-------|-------|-------|------|------|------|------|------|------|
| 1.80V/cell | 240.1 | 174.2 | 142.1 | 90.3 | 69.2 | 56.9 | 33.6 | 25.2 | 17.3 | 10.2 | 5.43 |
| 1.75V/cell | 270.2 | 191.3 | 154.1 | 94.1 | 71.8 | 58.7 | 34.5 | 25.8 | 17.7 | 10.4 | 5.53 |
| 1.70V/cell | 292.2 | 204.4 | 166.4 | 97.3 | 74.1 | 60.4 | 35.5 | 26.4 | 18.0 | 10.6 | 5.58 |
| 1.65V/cell | 315.0 | 218.0 | 175.9 | 101.6 | 77.2 | 62.8 | 36.5 | 27.2 | 18.4 | 10.7 | 5.66 |
| 1.60V/cell | 336.7 | 232.9 | 183.9 | 106.2 | 80.0 | 64.9 | 37.5 | 27.6 | 18.7 | 10.8 | 5.71 |

Constant Power Discharge (Watts per cell at 25°C/77°F)

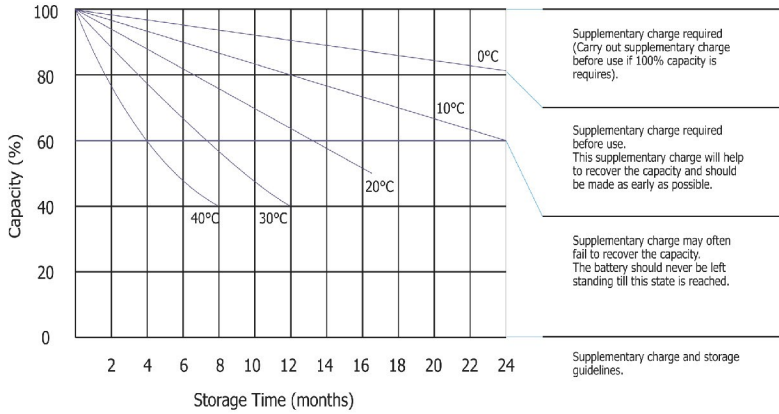
| F.V/Time | 5min | 10min | 15min | 30min | 45min | 1h | 2h | 3h | 5h | 10h | 20h |
|------------|-------|-------|-------|-------|-------|-------|------|------|------|------|-------|
| 1.80V/cell | 444.9 | 325.7 | 275.1 | 171.5 | 132.8 | 111.9 | 65.3 | 49.4 | 34.5 | 20.4 | 10.93 |
| 1.75V/cell | 490.5 | 349.1 | 288.9 | 178.5 | 138.3 | 114.4 | 67.1 | 50.4 | 35.2 | 20.6 | 11.02 |
| 1.70V/cell | 511.3 | 367.4 | 303.9 | 184.5 | 142.7 | 116.0 | 68.6 | 51.4 | 35.6 | 20.8 | 11.11 |
| 1.65V/cell | 535.3 | 384.5 | 315.1 | 192.7 | 146.9 | 119.9 | 70.1 | 52.4 | 35.8 | 21.0 | 11.24 |
| 1.60V/cell | 558.3 | 400.2 | 328.7 | 198.6 | 150.7 | 123.6 | 71.5 | 53.4 | 36.3 | 21.2 | 11.45 |

Note: The above characteristics data are average values obtained within three charge/discharge cycles, not the minimum values.

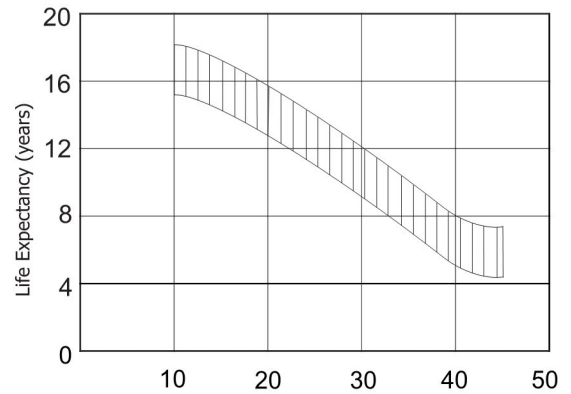
Dimension



Storage Characteristics

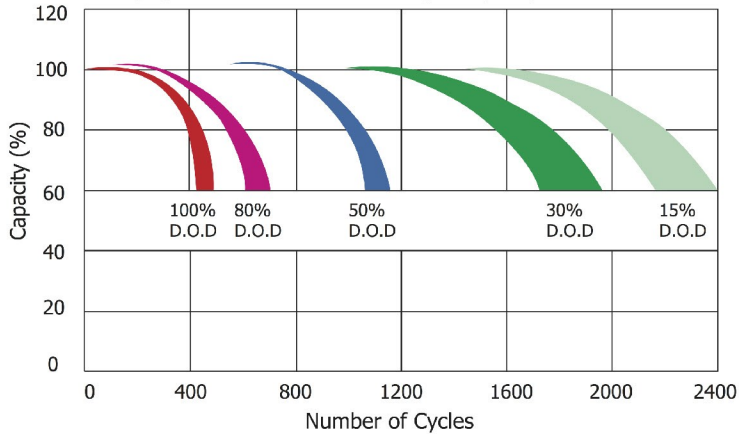


Effect Of Temperature On Float Life

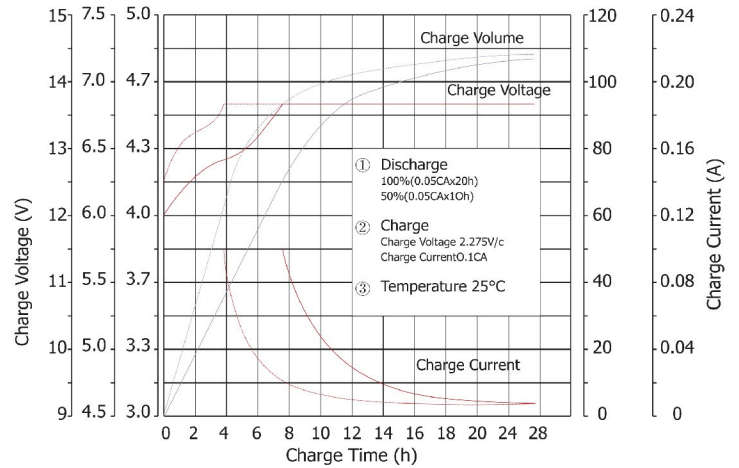


Cycle Life With Depth Of Discharge (D.O.D.)

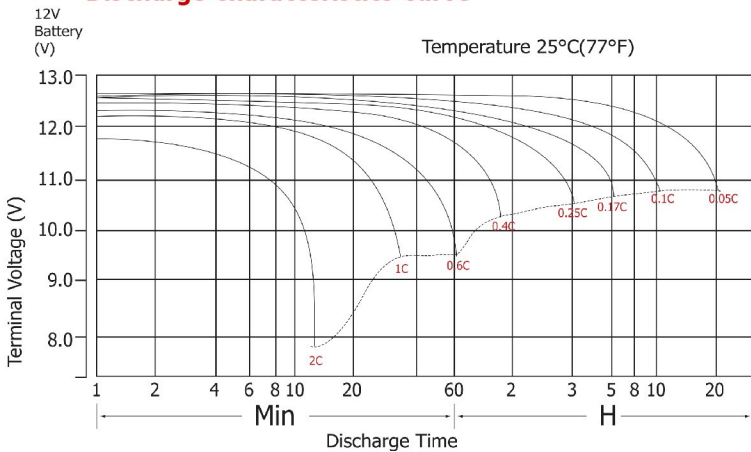
Testing condition
 Discharging: current 0.17C (FV 1.7V/cell);
 Charging: current 0.25C max, voltage 2.45V/cell;
 Charging volume: 125% of discharged capacity



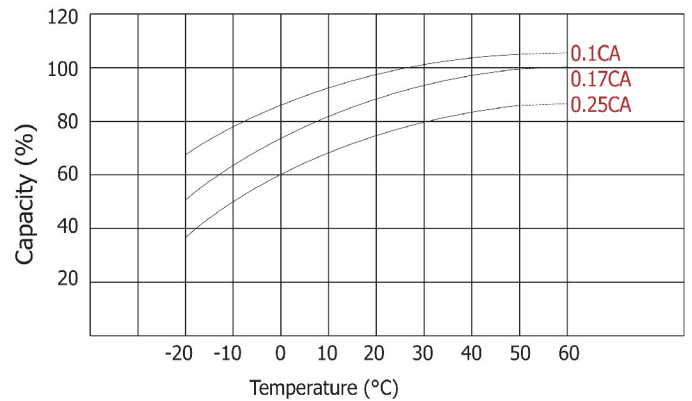
Charge Characteristics Curve For Standby Use



Discharge Characteristics Curve



Temperature Effects With Capacity



Certificates

