

⚡ Specifications

Nominal Voltage(V)

12V

Nominal Capacity

| | | |
|--------------|-------------------|---------|
| 10 hour rate | (23A to 10.80V) | 230Ah |
| 5 hour rate | (39.1A to 10.20V) | 195.5Ah |
| 1 hour rate | (138A to 9.60V) | 138Ah |

Weight

Approx. 73.1kg(161Lbs.)

Internal Resistance (at 1KHz)

Approx. 2.2 mΩ

Maximum Discharge Current for

5 seconds: 1840A

Charging Methods at 25°C(77°F)

| | |
|----------------------------|---------------|
| Cycle use: | |
| Charging Voltage | 14.4 to 15.0V |
| Coefficient -5.0mV/°C/cell | |
| Maximum Charging Current : | 69A |
| Standby use: | |
| Float Charging Voltage | 13.5 to 13.8V |
| Coefficient -3.0mV/°C/cell | |

Operating Temperature Range

| | | | |
|-----------|------------|----|-------------|
| Charge | -15°C(5°F) | to | 40°C(104°F) |
| Discharge | -15°C(5°F) | to | 50°C(122°F) |
| Storage | -15°C(5°F) | to | 40°C(104°F) |

Charge Retention (shelf life) at 20°C(68°F)

| | |
|---------|-----|
| 1 month | 98% |
| 3 month | 94% |
| 6 month | 85% |

Case Material

ABS UL94 HB
Option: Flammability resistance of (UL94 V-0)

Design Life & Standard

EUROBAT(20°C) : > 12 YEARS VERY LONG LIFE

Terminal

F18



⚡ Dimensions

Length (L) 522±3 (20.55±0.12)

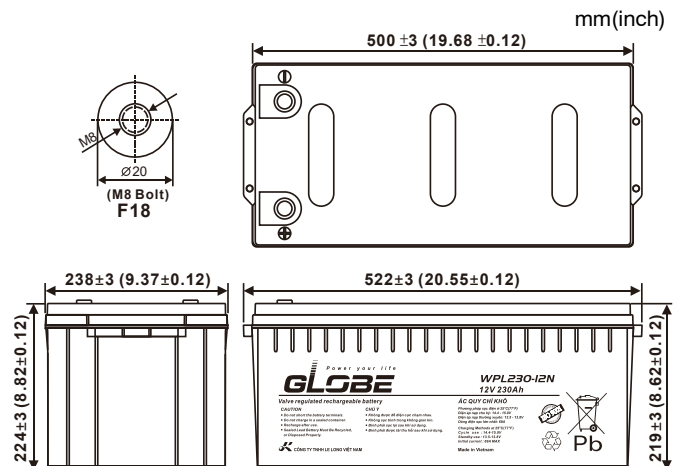
Width (W) 238±3 (9.37±0.12)

Height (H) 219±3 (8.62±0.12)

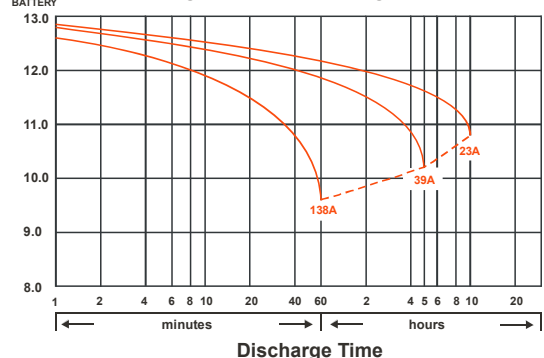
Overall Height (HT) 224±3 (8.82±0.12)

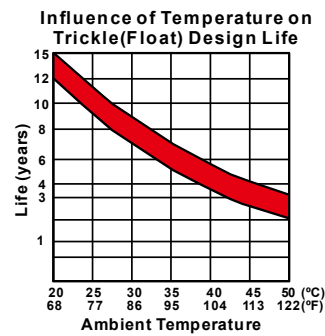
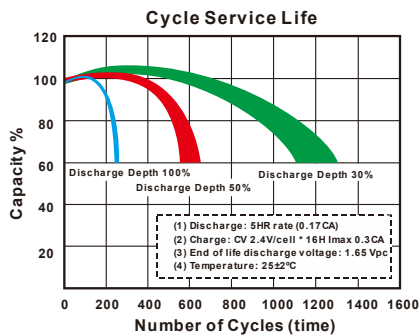
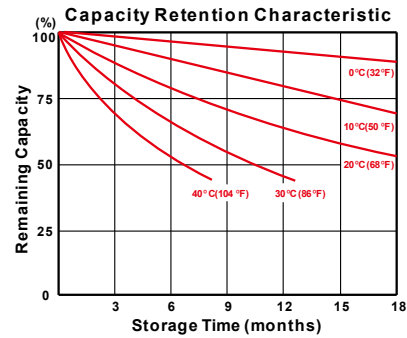
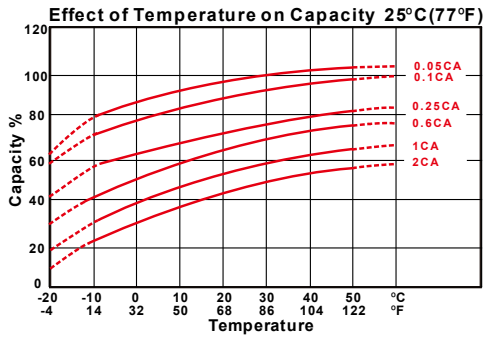
Description of torque value of hardware for the terminals:

Recommended torque value M8: 12 N-m (122 kgf-cm)
Maximum allowable torque value M8: 20 N-m (204 kgf-cm)



(V) FOR 12V BATTERY Discharge Time VS. Discharge Current (25°C)





- PERFORMANCE DATA

Discharge Rates in Watts to Various End Voltages at 25°C(77°F)

| End Voltage | | 1.85V | 1.80V | 1.75V | 1.70V | 1.67V | 1.65V | 1.60V |
|-------------|-----|-------|-------|-------|-------|-------|-------|-------|
| Time | min | 568 | 662 | 710 | 747 | 764 | 781 | 811 |
| 15 | min | 395 | 452 | 483 | 510 | 522 | 534 | 550 |
| 30 | min | 231 | 256 | 277 | 297 | 305 | 316 | 327 |
| 60 | min | 186 | 202 | 212 | 220 | 224 | 228 | 233 |
| 90 | min | 161 | 170 | 177 | 182 | 184 | 186 | 190 |
| 120 | min | 118 | 125 | 129 | 132 | 133 | 134 | 136 |
| 180 | min | 92.2 | 97.0 | 100 | 103 | 104 | 105 | 106 |
| 240 | min | 79.0 | 82.7 | 84.8 | 86.7 | 87.2 | 87.8 | 88.8 |
| 300 | min | 42.8 | 44.8 | 46.3 | 47.5 | 47.8 | 48.3 | 49.0 |
| 600 | min | 23.2 | 24.3 | 25.0 | 25.5 | 25.7 | 25.8 | 26.2 |
| 1200 | min | | | | | | | |

- Discharge Rates in Amperes to Various End Voltages at 25°C(77°F)

| End Voltage | | 1.85V | 1.80V | 1.75V | 1.70V | 1.67V | 1.65V | 1.60V |
|-------------|-----|-------|-------|-------|-------|-------|-------|-------|
| Time | min | 316 | 360 | 389 | 412 | 421 | 433 | 447 |
| 15 | min | 226 | 252 | 271 | 285 | 290 | 296 | 305 |
| 30 | min | 124 | 137 | 148 | 155 | 158 | 162 | 168 |
| 60 | min | 91.6 | 101 | 107 | 112 | 113 | 115 | 119 |
| 90 | min | 73.4 | 81.5 | 86.2 | 89.6 | 91.1 | 92.8 | 95.1 |
| 120 | min | 54.5 | 58.6 | 61.3 | 63.7 | 64.4 | 65.2 | 66.9 |
| 180 | min | 43.8 | 46.4 | 48.5 | 49.9 | 50.5 | 51.2 | 52.3 |
| 240 | min | 38.1 | 40.5 | 41.9 | 43.1 | 43.5 | 43.0 | 43.8 |
| 300 | min | 22.3 | 23.0 | 23.3 | 23.6 | 23.7 | 23.9 | 24.1 |
| 600 | min | 11.6 | 12.1 | 12.4 | 12.6 | 12.7 | 12.8 | 12.9 |
| 1200 | min | | | | | | | |

All data on the spec. sheet is an average value:

The tolerance range : $X < 6\text{min}$ (+15%~-15%), $6\text{min} \leq X < 10\text{min}$ (+12%~-12%), $10\text{min} \leq X < 60\text{min}$ (+8%~-8%), $X \geq 60\text{min}$ (+5%~-5%)

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