

⚡ Specifications

Nominal Voltage(V)

12V

Nominal Capacity

| | | |
|--------------|--------------------|----------|
| 10 hour rate | (15.5A to 10.80V) | 155Ah |
| 5 hour rate | (26.35A to 10.20V) | 131.75Ah |
| 1 hour rate | (93A to 9.60V) | 93Ah |

Weight

Approx. 48.2kg(106Lbs.)

Internal Resistance (at 1KHz)

Approx. 3.4 mΩ

Maximum Discharge Current for

5 seconds: 1550A

Charging Methods at 25°C(77°F)

| | |
|----------------------------|---------------|
| Cycle use: | |
| Charging Voltage | 14.4 to 15.0V |
| Coefficient -5.0mV/°C/cell | |
| Maximum Charging Current : | 46.5A |
| 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

Expected Trickle Design Life: 10-12 years at 20°C according to Eurobat.

Terminal

F18

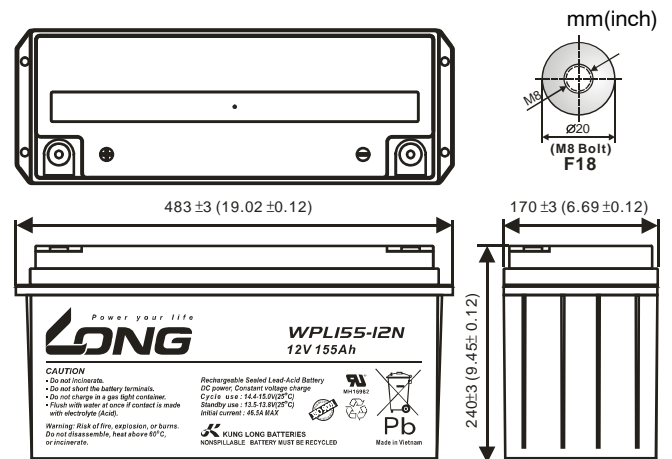


⚡ Dimensions

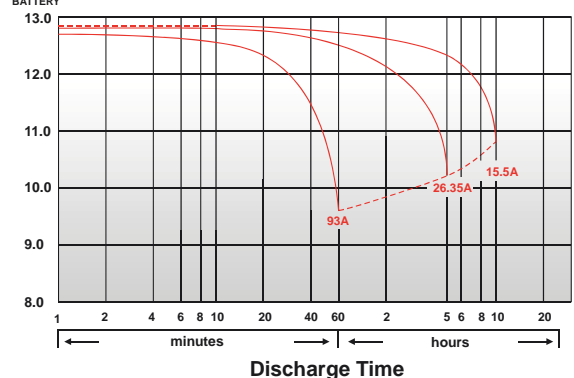
| | |
|---------------------|--------------------|
| Length (L) | 483±3 (19.02±0.12) |
| Width (W) | 170±3 (6.69±0.12) |
| Height (H) | 240±3 (9.45±0.12) |
| Overall Height (HT) | 240±3 (9.45±0.12) |

Description of torque value of hard ware for the terminals:

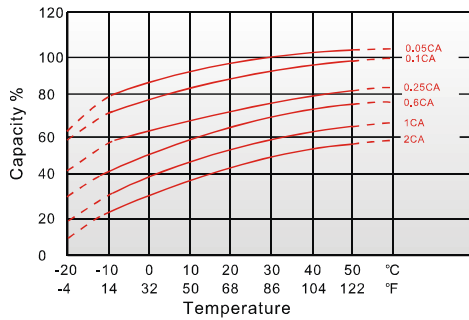
| | |
|--------------------------------|-----------------------|
| Recommended torque value | M8:12 N-m (122kgf-cm) |
| Maximum allowable torque value | M8:20 N-m (204kgf-cm) |



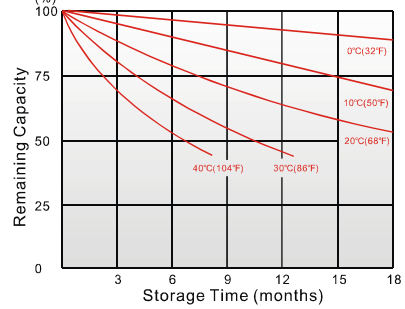
(V) FOR 12V BATTERY Discharge Time VS. Discharge Current (25°C)



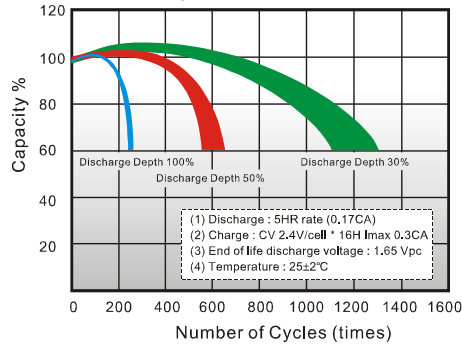
Effect of Temperature on Capacity 25°C(77°F)



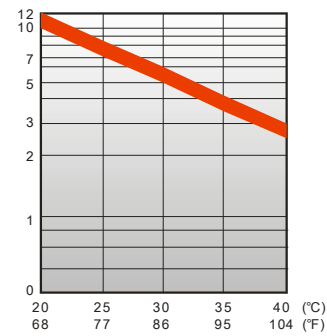
Capacity Retention Characteristic



Cycle Service Life



Trickle (or float) Service Life



- PERFORMANCE DATA

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

| End Voltage | | 1.80V | 1.75V | 1.70V | 1.65V | 1.60V |
|-------------|-----|-------|-------|-------|-------|-------|
| Time | | | | | | |
| 10 | min | 566 | 605 | 643 | 698 | 724 |
| 15 | min | 483 | 505 | 533 | 573 | 616 |
| 20 | min | 406 | 420 | 437 | 459 | 498 |
| 30 | min | 312 | 317 | 324 | 328 | 355 |
| 45 | min | 251 | 254 | 260 | 267 | 276 |
| 60 | min | 199 | 201 | 206 | 212 | 218 |
| 120 | min | 118 | 121 | 123 | 124 | 126 |
| 180 | min | 90.0 | 91.5 | 92.8 | 93.5 | 94.2 |
| 300 | min | 56.8 | 58.2 | 59.3 | 60.3 | 61.7 |
| 480 | min | 37.2 | 38.0 | 38.7 | 39.3 | 40.7 |
| 600 | min | 30.7 | 31.5 | 31.8 | 32.3 | 33.7 |

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

| End Voltage | | 1.80V | 1.75V | 1.70V | 1.65V | 1.60V |
|-------------|-----|-------|-------|-------|-------|-------|
| Time | | | | | | |
| 10 | min | 275 | 300 | 326 | 340 | 375 |
| 15 | min | 231 | 250 | 270 | 278 | 300 |
| 20 | min | 194 | 206 | 219 | 223 | 237 |
| 30 | min | 156 | 162 | 167 | 169 | 176 |
| 45 | min | 115 | 119 | 123 | 125 | 128 |
| 60 | min | 94.2 | 97.2 | 100 | 103 | 106 |
| 120 | min | 55.9 | 58.2 | 59.2 | 60.3 | 61.3 |
| 180 | min | 42.2 | 44.3 | 44.7 | 45.1 | 45.4 |
| 300 | min | 27.0 | 27.5 | 28.2 | 28.8 | 29.4 |
| 480 | min | 18.1 | 18.3 | 18.5 | 18.8 | 19.0 |
| 600 | min | 15.1 | 15.2 | 15.3 | 15.6 | 15.7 |

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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