

⚡ Specifications

Nominal Voltage(V)

12V

Nominal Capacity

| | | |
|--------------|--------------------|---------|
| 10 hour rate | (12.5A to 10.80V) | 125Ah |
| 5 hour rate | (21.25A to 10.20V) | 106.3Ah |
| 1 hour rate | (75A to 9.60V) | 75Ah |
| 1 C | (125A to 9.60V) | 62.5Ah |

Weight

Approx. 39kg(85.8Lbs.)

Internal Resistance (at 1KHz)

Approx. 7 mΩ

Maximum Discharge Current for

5 seconds: 1250A

Charging Methods at 25°C(77°F)

Cycle use:

Charging Voltage 14.4 to 15.0V

Coefficient -5.0mV/°C/cell

Maximum Charging Current : 37.5A

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

12 Years.

Terminal

F18



⚡ Dimensions

Length (L)

550±3 (21.65±0.12)

Width (W)

110±3 (4.33±0.12)

Height (H)

288±3 (11.34±0.12)

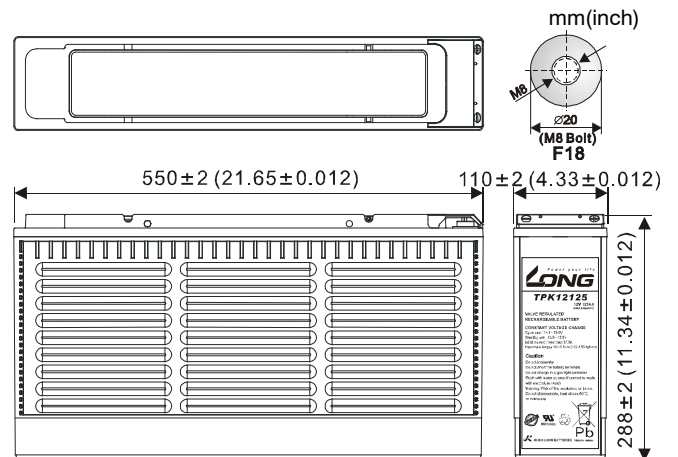
Overall Height (HT)

288±3 (11.34±0.12)

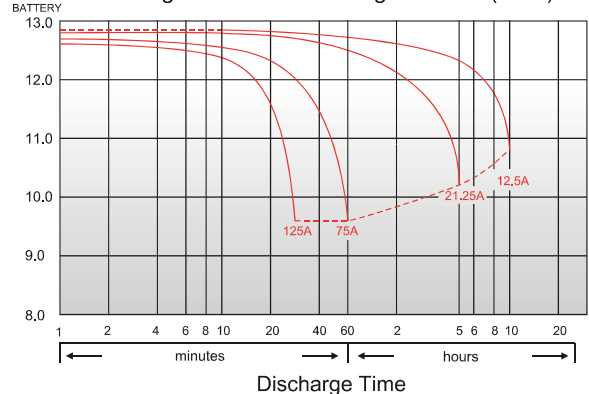
Description of torque value of hard ware for the terminals:

Recommended torque value M8:12 N-m (122kgf-cm)

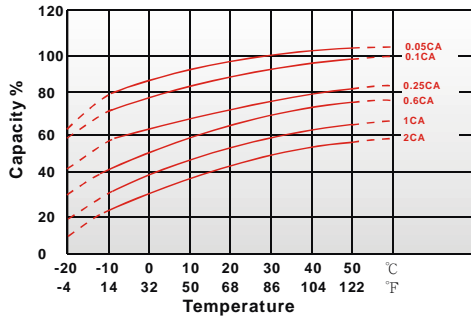
Maximum allowable torque value M8:15 N-m (153kgf-cm)



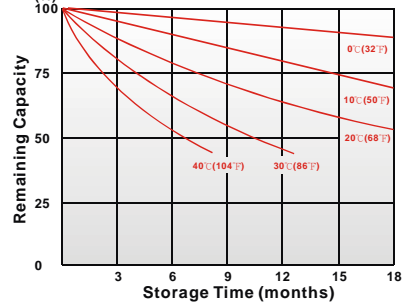
(V) FOR 12V BATTERY Discharge Time VS. Discharge Current (25°C)



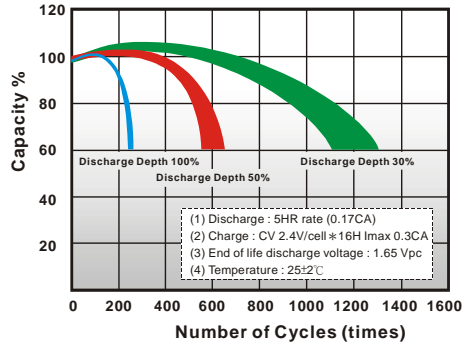
Effect of Temperature on Capacity 25°C (77°F)



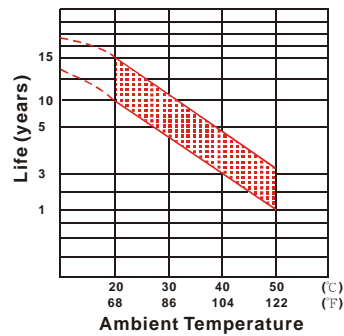
Capacity Retention Characteristic



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 | | 1.85V | 1.80V | 1.75V | 1.70V | 1.67V | 1.65V | 1.60V |
|-------------|-----|-------|-------|-------|-------|-------|-------|-------|
| Time | | | | | | | | |
| 15 | min | 268 | 328 | 370 | 397 | 404 | 413 | 422 |
| 30 | min | 159 | 196 | 220 | 236 | 240 | 246 | 251 |
| 60 | min | 136 | 146 | 152 | 155 | 156 | 157 | 159 |
| 120 | min | 77.2 | 82.8 | 85.2 | 87.2 | 87.8 | 88.5 | 89.2 |
| 180 | min | 59.3 | 63.5 | 65.3 | 66.7 | 67.2 | 67.7 | 68.2 |
| 240 | min | 48.5 | 51.0 | 52.5 | 53.7 | 54.0 | 54.5 | 55.0 |
| 300 | min | 40.8 | 43.0 | 44.5 | 45.7 | 46.0 | 46.5 | 46.8 |
| 480 | min | 28.3 | 29.8 | 31.0 | 31.8 | 32.0 | 32.3 | 32.7 |
| 600 | min | 24.5 | 25.5 | 26.3 | 27.0 | 27.2 | 27.3 | 27.5 |
| 1200 | min | 12.6 | 13.2 | 13.5 | 13.8 | 13.9 | 14.0 | 14.1 |

- 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 | | | | | | | | |
| 15 | min | 153 | 188 | 213 | 226 | 230 | 235 | 241 |
| 30 | min | 89.2 | 108 | 121 | 129 | 131 | 134 | 137 |
| 60 | min | 70.4 | 75.9 | 77.8 | 79.5 | 80.1 | 80.8 | 81.6 |
| 120 | min | 38.2 | 42.3 | 44.0 | 45.3 | 45.7 | 45.2 | 45.8 |
| 180 | min | 27.7 | 30.8 | 31.9 | 32.8 | 33.1 | 33.5 | 34.0 |
| 240 | min | 22.6 | 24.8 | 25.7 | 26.4 | 26.6 | 26.9 | 27.2 |
| 300 | min | 19.9 | 21.3 | 22.1 | 22.6 | 22.7 | 22.9 | 23.1 |
| 480 | min | 14.3 | 15.2 | 15.6 | 15.8 | 15.9 | 16.0 | 16.1 |
| 600 | min | 11.8 | 12.6 | 13.0 | 13.3 | 13.4 | 13.5 | 13.6 |
| 1200 | min | 6.42 | 6.63 | 6.72 | 6.79 | 6.82 | 6.85 | 6.89 |

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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