

⚡ Specifications

Nominal Voltage(V)

12V

Nominal Capacity

| | | | | |
|--------------|-------|----|---------|---------|
| 10 hour rate | (10A | to | 10.80V) | 100Ah |
| 5 hour rate | (17A | to | 10.20V) | 85Ah |
| 1 hour rate | (60A | to | 9.60V) | 60Ah |
| 1C | (100A | to | 9.60V) | 63.33Ah |

Weight

Approx. 30.0kg(66.0Lbs.)

Internal Resistance (at 1KHz)

Approx. 5 mΩ

Maximum Discharge Current for

5 seconds:1200A

Charging Methods at 25°C(77°F)

Cycle use:

Charging Voltage 14.4 to 15.0V

Coefficient -5.0mV/°C/cell

Maximum Charging Current : 30A

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

F8



⚡ Dimensions

Length (L) 307±3 (12.09±0.12)

Width (W) 168±3 (6.61±0.12)

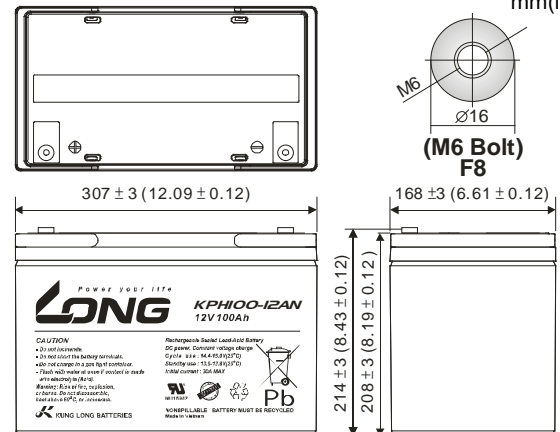
Height (H) 208±3 (8.19±0.12)

Overall Height (HT) 214±3 (8.43±0.12)

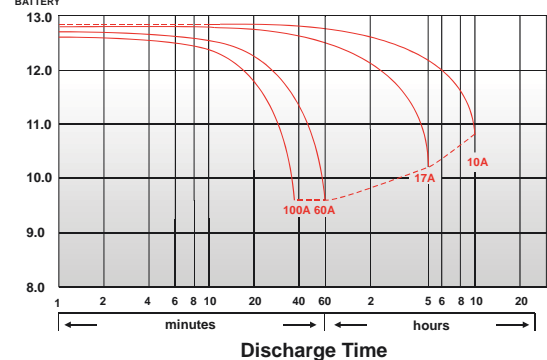
Description of torque value of hard ware for the terminals:

Recommended torque value M6: 7 N-m (71kgf-cm)

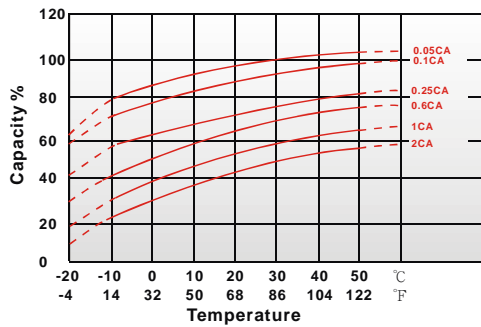
Maximum allowable torque value M6: 10 N-m(102kgf-cm)



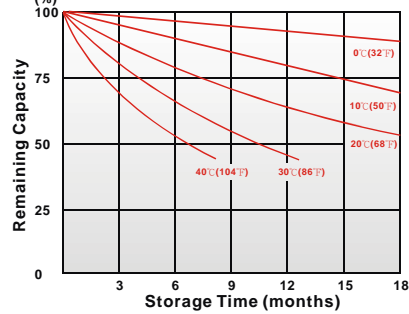
(V) FOR 12V BATTERY Discharge Time VS. Discharge Current (25°C)



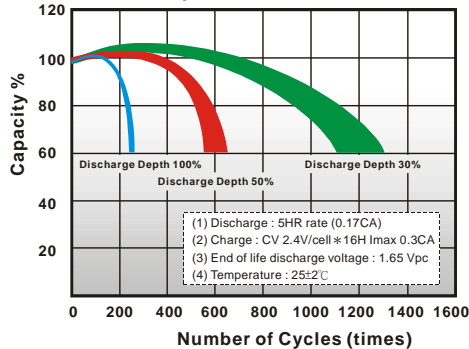
Effect of Temperature on Capacity 25°C(77°F)



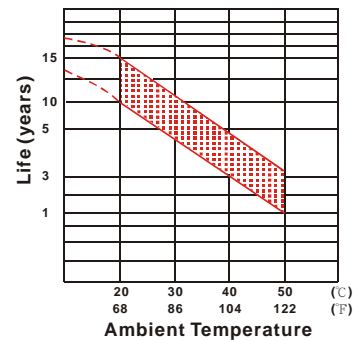
Capacity Retention Characteristic



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 | min | | | | | | | |
| 5 | min | 432 | 491 | 527 | 561 | 577 | 598 | 625 |
| 10 | min | 402 | 436 | 463 | 488 | 497 | 510 | 521 |
| 15 | min | 310 | 345 | 373 | 385 | 389 | 395 | 403 |
| 30 | min | 218 | 235 | 248 | 252 | 254 | 255 | 257 |
| 60 | min | 130 | 136 | 140 | 142 | 143 | 144 | 145 |
| 120 | min | 68.3 | 71.6 | 74.2 | 74.9 | 75.6 | 76.4 | 77.0 |
| 180 | min | 52.6 | 54.5 | 55.5 | 56.6 | 57.1 | 57.8 | 58.8 |
| 240 | min | 35.1 | 36.8 | 39.2 | 41.2 | 41.8 | 42.6 | 43.2 |
| 300 | min | 33.8 | 35.0 | 36.7 | 37.1 | 37.2 | 37.4 | 37.7 |
| 600 | min | 18.9 | 19.6 | 19.9 | 20.2 | 20.3 | 20.5 | 20.7 |
| 1200 | min | 10.3 | 10.6 | 10.9 | 11.1 | 11.2 | 11.3 | 11.4 |

- 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 | | | | | | | |
| 5 | min | 236 | 261 | 300 | 320 | 341 | 356 | 375 |
| 10 | min | 195 | 218 | 239 | 256 | 262 | 271 | 286 |
| 15 | min | 174 | 189 | 202 | 210 | 213 | 216 | 221 |
| 30 | min | 115 | 123 | 129 | 132 | 133 | 134 | 136 |
| 60 | min | 63.2 | 65.50 | 67.5 | 69.6 | 70.5 | 71.5 | 73.3 |
| 120 | min | 36.2 | 37.5 | 38.1 | 38.7 | 38.9 | 39.2 | 39.5 |
| 180 | min | 27.9 | 28.9 | 29.4 | 29.8 | 30.0 | 30.2 | 30.4 |
| 240 | min | 18.4 | 19.2 | 20.1 | 20.3 | 20.4 | 20.5 | 20.7 |
| 300 | min | 16.8 | 17.6 | 18.4 | 18.6 | 18.7 | 18.8 | 19.0 |
| 600 | min | 9.7 | 10.0 | 10.2 | 10.4 | 10.5 | 10.6 | 10.7 |
| 1200 | min | 5.07 | 5.22 | 5.36 | 5.39 | 5.40 | 5.42 | 5.44 |

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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