

⚡ Specifications

Nominal Voltage(V)

12V

Nominal Power

15 mins rate: 100W/cell to 1.67V/cell

Nominal Capacity

| | | |
|--------------|-------------------|--------|
| 20 hour rate | (1.4A to 10.50V) | 28Ah |
| 8 hour rate | (3.36A to 10.50V) | 26.9Ah |
| 5 hour rate | (4.76A to 10.20V) | 23.8Ah |

Weight

Approx. 9.2kg(20.2Lbs.)

Internal Resistance (at 1KHz)

Approx. 9.2mΩ

Maximum Discharge Current for

5 seconds: 420A

Short Circuit Current (A) IEC 60896-21-22

980 A

Charging Methods at 25°C(77°F)

| | |
|----------------------------|----------------|
| Maximum Charging Current : | 8.4A |
| Boost Charging Voltage | 14.4 to 15.0V |
| Boost Charge Time | 8-9Hr |
| 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 | 96% |
| 6 month | 94% |

Case Material

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

Battery Construction

| Component | Positive Plate | Negative plate | Safety valve | Terminal | Separator | Electrolyte |
|--------------|----------------|----------------|--------------|----------|-----------|---------------|
| Raw material | Lead dioxide | Lead | Rubber | Copper | AGM | Sulfuric acid |



⚡ Dimensions

Length (L)

166±²₁ (6.54±^{0.08}_{0.04})

Width (W)

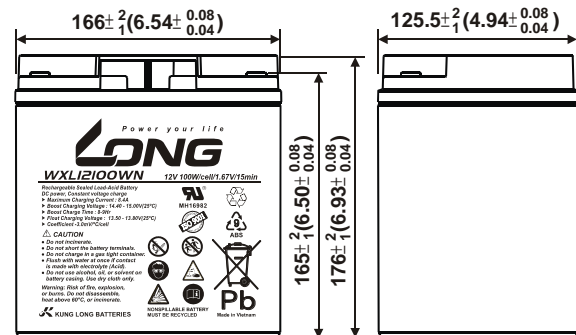
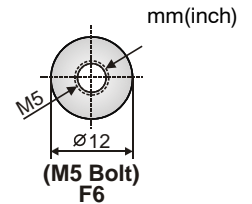
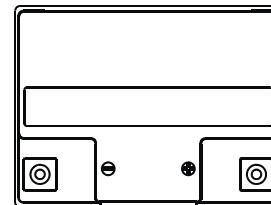
125.5±²₁ (4.94±^{0.08}_{0.04})

Height (H)

176±²₁ (6.93±^{0.08}_{0.04})

Overall Height (HT)

176±²₁ (6.93±^{0.08}_{0.04})



Terminal

F6

Recommended torque value

M5: 4 N-m (41kgf-cm)

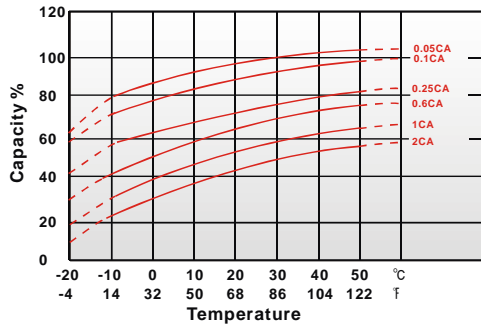
Maximum allowable torque value

M5: 6 N-m (61kgf-cm)

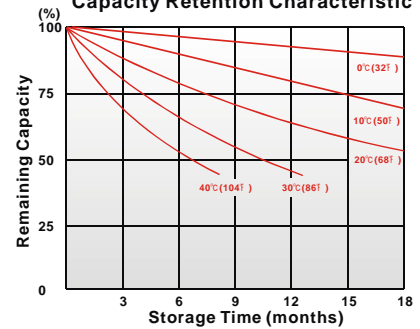
Design Life

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

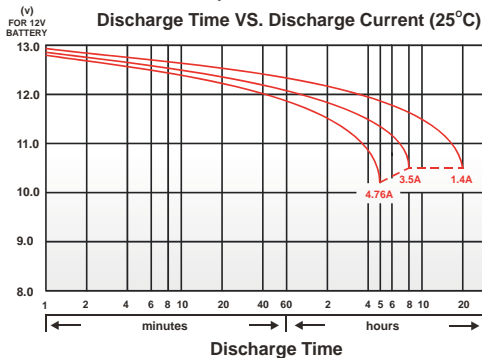
Effect of Temperature on Capacity 25°C(77°F)



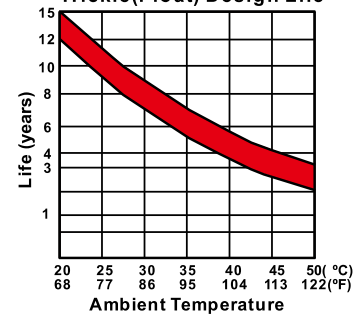
Capacity Retention Characteristic



Discharge Time VS. Discharge Current (25°C)



Influence of Temperature on Trickle(Float) Design 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 |
|-------------|-----|-------|-------|-------|-------|-------|-------|-------|
| 2 | min | 181 | 210 | 234 | 245 | 255 | 264 | 273 |
| 4 | min | 157 | 172 | 186 | 199 | 211 | 221 | 231 |
| 5 | min | 139 | 161 | 179 | 186 | 191 | 196 | 200 |
| 6 | min | 130 | 156 | 166 | 173 | 180 | 185 | 190 |
| 8 | min | 125 | 139 | 145 | 150 | 155 | 160 | 165 |
| 10 | min | 107 | 118 | 124 | 128 | 133 | 135 | 137 |
| 15 | min | 86.4 | 94.7 | 102 | 104 | 106 | 108 | 110 |
| 20 | min | 76.6 | 82.3 | 83.4 | 84.3 | 85.1 | 85.9 | 86.7 |
| 30 | min | 54.4 | 58.7 | 59.9 | 60.7 | 61.4 | 62.1 | 62.8 |
| 45 | min | 45.4 | 48.5 | 49.4 | 49.9 | 50.3 | 50.6 | 50.9 |
| 60 | min | 35.0 | 36.5 | 36.9 | 37.2 | 37.5 | 37.8 | 38.2 |
| 90 | min | 25.0 | 25.9 | 26.5 | 26.9 | 27.3 | 27.5 | 27.7 |
| 120 | min | 21.0 | 21.9 | 22.3 | 22.5 | 22.6 | 22.8 | 23.0 |
| 180 | min | 15.5 | 16.2 | 16.4 | 16.6 | 16.7 | 16.8 | 16.9 |
| 240 | min | 11.9 | 12.4 | 12.7 | 12.8 | 12.9 | 13.0 | 13.1 |
| 300 | min | 10.0 | 10.4 | 10.5 | 10.6 | 10.7 | 10.8 | 10.9 |
| 600 | min | 5.56 | 5.72 | 5.85 | 5.86 | 5.88 | 5.89 | 5.91 |
| 1200 | min | 3.00 | 3.03 | 3.09 | 3.11 | 3.12 | 3.14 | 3.15 |

- 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 |
|-------------|-----|-------|-------|-------|-------|-------|-------|-------|
| 2 | min | 92.5 | 115 | 133 | 148 | 158 | 167 | 172 |
| 4 | min | 80.5 | 96.5 | 109 | 114 | 119 | 124 | 128 |
| 5 | min | 72.5 | 88.0 | 102 | 107 | 112 | 116 | 119 |
| 6 | min | 70.8 | 83.8 | 90.5 | 96.9 | 103 | 108 | 113 |
| 8 | min | 68.3 | 75.3 | 81.6 | 85.4 | 88.4 | 90.6 | 92.6 |
| 10 | min | 57.1 | 63.9 | 66.2 | 69.6 | 72.4 | 75.2 | 77.7 |
| 15 | min | 44.6 | 49.0 | 52.7 | 54.6 | 56.1 | 57.6 | 58.6 |
| 20 | min | 35.7 | 39.2 | 42.1 | 43.7 | 44.9 | 46.1 | 46.9 |
| 30 | min | 27.8 | 29.9 | 31.0 | 31.9 | 32.6 | 33.2 | 33.4 |
| 45 | min | 21.1 | 22.6 | 23.0 | 24.2 | 24.7 | 24.9 | 25.1 |
| 60 | min | 16.3 | 17.4 | 18.1 | 18.6 | 19.1 | 19.3 | 19.4 |
| 90 | min | 12.6 | 13.6 | 14.0 | 14.4 | 14.7 | 15.0 | 15.2 |
| 120 | min | 10.6 | 11.3 | 11.5 | 11.8 | 11.9 | 12.2 | 12.3 |
| 180 | min | 7.39 | 7.69 | 7.94 | 8.05 | 8.18 | 8.35 | 8.38 |
| 240 | min | 5.97 | 6.09 | 6.23 | 6.34 | 6.41 | 6.48 | 6.51 |
| 300 | min | 4.95 | 5.08 | 5.19 | 5.33 | 5.38 | 5.42 | 5.45 |
| 600 | min | 2.74 | 2.82 | 2.91 | 2.93 | 2.95 | 2.97 | 2.98 |
| 1200 | min | 1.45 | 1.48 | 1.51 | 1.53 | 1.54 | 1.55 | 1.56 |

110925-1A-VNM0576