

WP45-12 12Volt 45Ah

Specifications

Nominal Voltage(V) **12V**

Nominal Capacity

| | | |
|--------------|--------------------|----------------|
| 20 hour rate | (2.25A to 10.50V) | 45Ah |
| 10 hour rate | (4.275A to 10.50V) | 42.75Ah |
| 5 hour rate | (7.65A to 10.20V) | 38.25Ah |
| 1 C | (45A to 9.60V) | 25.5Ah |
| 3 C | (135A to 9.60V) | 18Ah |

Weight **Approx. 14.5kg(31.9Lbs.)**

Internal Resistance (at 1KHz) **Approx. 7 mΩ**

Maximum Discharge Current for

5 seconds: **540A**

Charging Methods at 25 (77)

Cycle use:

Charging Voltage **14.4 to 15.0V**

Coefficient -5.0mv/ /cell

Maximum Charging Current : **13.5A**

Standby use:

Float Charging Voltage **13.50 to 13.80V**

Coefficient -3.0mv/ /cell

Operating Temperature Range

Charge **-15 (5) to 40 (104)**

Discharge **-15 (5) to 50 (122)**

Storage **-15 (5) to 40 (104)**

Charge Retention (shelf life) at 20 (68)

1 month **92%**

3 month **90%**

6 month **80%**

Case Material **ABS**

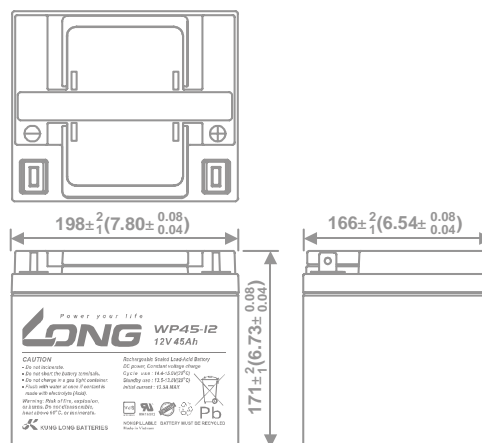
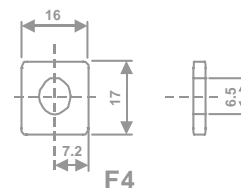
(Option: UL94 HB & UL94 V-0 flame retardant)

Terminal **F4**

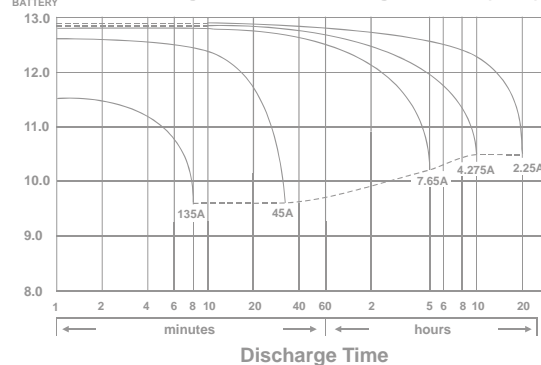


Dimensions

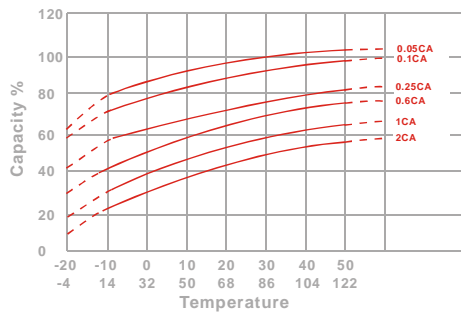
mm(inch)



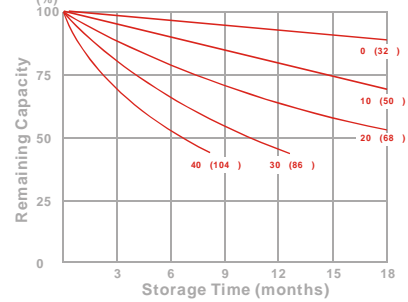
(v) FOR 12V BATTERY Discharge Time VS. Discharge Current (25)



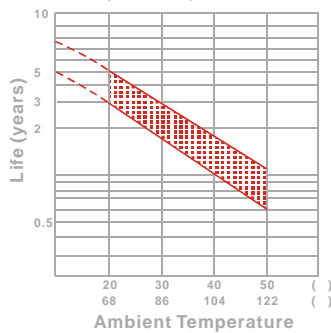
Effect of Temperature on Capacity 25 (77)



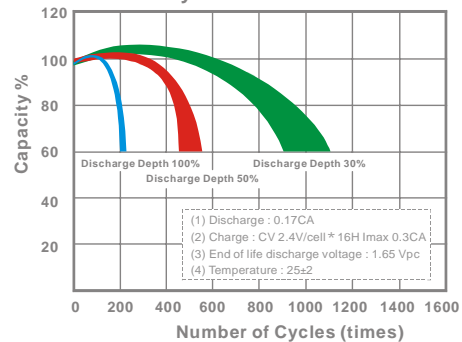
Capacity Retention Characteristic



Trickle (or float) Service Life



Cycle Service Life



- PERFORMANCE DATA

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

| End Voltage | | 1.85V | 1.80V | 1.75V | 1.70V | 1.67V | 1.65V | 1.60V |
|-------------|-----|-------|-------|-------|-------|-------|-------|-------|
| Time | | | | | | | | |
| 5 | min | 1399 | 1683 | 1884 | 2014 | 2048 | 2085 | 2122 |
| 10 | min | 890 | 1071 | 1199 | 1281 | 1303 | 1327 | 1350 |
| 15 | min | 694 | 816 | 901 | 955 | 969 | 985 | 1001 |
| 30 | min | 372 | 438 | 483 | 512 | 519 | 528 | 537 |
| 60 | min | 293 | 311 | 321 | 329 | 332 | 336 | 338 |
| 120 | min | 154 | 164 | 169 | 174 | 175 | 177 | 178 |
| 180 | min | 123 | 131 | 135 | 138 | 139 | 141 | 142 |
| 240 | min | 98.4 | 104 | 108 | 111 | 112 | 113 | 114 |
| 300 | min | 84.0 | 89.1 | 92.2 | 94.4 | 95.3 | 96.3 | 97.1 |
| 600 | min | 49.4 | 52.4 | 54.2 | 55.6 | 56.1 | 56.6 | 57.1 |
| 1200 | min | 26.0 | 27.6 | 28.6 | 29.3 | 29.6 | 29.9 | 30.1 |

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

| End Voltage | | 1.85V | 1.80V | 1.75V | 1.70V | 1.67V | 1.65V | 1.60V |
|-------------|-----|-------|-------|-------|-------|-------|-------|-------|
| Time | | | | | | | | |
| 5 | min | 127 | 153 | 171 | 183 | 186 | 190 | 193 |
| 10 | min | 79.5 | 95.6 | 107 | 114 | 116 | 118 | 121 |
| 15 | min | 60.3 | 71.0 | 78.3 | 83.1 | 84.2 | 85.6 | 87.0 |
| 30 | min | 31.7 | 37.3 | 41.1 | 43.6 | 44.2 | 45.0 | 45.7 |
| 60 | min | 24.6 | 26.1 | 27.0 | 27.7 | 27.9 | 28.2 | 28.4 |
| 120 | min | 12.9 | 13.7 | 14.2 | 14.6 | 14.7 | 14.8 | 14.9 |
| 180 | min | 10.3 | 10.9 | 11.3 | 11.5 | 11.6 | 11.8 | 11.9 |
| 240 | min | 8.20 | 8.70 | 9.00 | 9.22 | 9.31 | 9.40 | 9.48 |
| 300 | min | 6.97 | 7.40 | 7.65 | 7.84 | 7.91 | 7.99 | 8.06 |
| 600 | min | 4.10 | 4.35 | 4.50 | 4.61 | 4.65 | 4.70 | 4.74 |
| 1200 | min | 2.15 | 2.28 | 2.36 | 2.42 | 2.44 | 2.47 | 2.49 |

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

The tolerance range : X<6min(+15%~-15%), 6min X<10min(+12%~-12%), 10min X < 60min(+8%~-8%), X 60min(+5%~-5%)