



LP12-40 (12V 38Ah)

| Specifications | |
|-------------------------------|--|
| Rated Voltage | 12 |
| Nominal Capacity (20Hr) | 38.0Ah |
| Dimensions | Length 197 mm |
| | Width 165 mm |
| | Container Height 170 mm |
| | Total Height 170 mm |
| Approx. Weight | 13.2 Kg (29.1lbs) |
| Terminal | T6 |
| Layout | 0 |
| Container material | ABS |
| Rated Capacity (25°C) | 38.0 Ah (20hr, 1.9A, 1.80V/cell) |
| | 36.1 Ah (10hr, 3.61A, 1.80V/cell) |
| | 31.1 Ah (5hr, 6.21A, 1.75V/cell) |
| | 28.2 Ah (3hr, 9.39A, 1.75V/cell) |
| | 22.0 Ah (1hr, 22.0A, 1.60V/cell) |
| Max. Discharge Current | 456A (5s) |
| Internal Resistance (25°C) | Approx 10mΩ |
| | Discharge: -15°C ~50°C (5~122°F) |
| Operating Temp. Range | Charge: 0°C ~40°C (32~104°F) |
| | Storage: -15°C ~40°C (5~104°F) |
| | |
| Nominal Operating Temp. Range | 25±3°C (77±5°F) |
| Cycle Use | Initial Charging Current less than 12.0A. Voltage 14.4V~15.0V at 25°C (77 °F)Temp. Coefficient -30mV/°C |
| Standby Use | No Limit on Initial Charging Current Voltage 13.5V~13.8V at 25°C (77 °F)Temp. Coefficient -20mV/°C |
| | 40°C (104°F) 103% |
| Effect Of Temp. To Capacity | 25°C (77°F) 100% |
| | 0°C (32°F) 86% |
| | LP series batteries may be stored for up to 6 months at 25°C (77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter. |



Description and Features

The LP Series AGM batteries have been specially developed to be widely applicable. These lead acid batteries with AGM technology are completely sealed and therefore 100% maintenance free and leak-proof. These batteries have a low self-discharge. The reliable and safe multipurpose batteries from the LP Series offer a long service life and can be used in various industries.

Features

- Absorbent Glass Mat technology
- Reliable and safe performance
- Long service life - 3-5 years in standby application (at 25°C)
- Suitable for multipurpose applications

| Layout | Terminal | UL certification |
|--------|----------|------------------|
| | | |

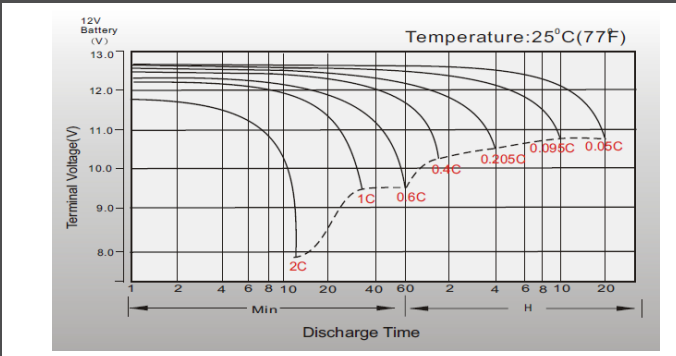
| Constant Current Discharge Characteristics: A (25°C) | | | | | | | | | | | | | | | |
|--|-------|--------|--------|--------|--------|--------|------|------|------|------|------|------|------|-------|-------|
| F.V/Time | 5 Min | 10 Min | 15 Min | 20 Min | 30 Min | 45 Min | 1Hr | 2 Hr | 3 Hr | 4 Hr | 5 Hr | 6 Hr | 8 Hr | 10 Hr | 20 Hr |
| 1.85V/cell | 61.8 | 48.6 | 41.3 | 34.6 | 27.5 | 20.8 | 17.0 | 10.8 | 8.57 | 7.00 | 5.64 | 4.91 | 3.99 | 3.41 | 1.88 |
| 1.80V/cell | 82.9 | 62.1 | 49.9 | 40.8 | 32.4 | 24.2 | 19.1 | 11.8 | 9.22 | 7.48 | 6.06 | 5.27 | 4.23 | 3.61 | 1.90 |
| 1.75V/cell | 93.5 | 68.2 | 54.5 | 43.9 | 33.6 | 25.1 | 19.9 | 12.3 | 9.39 | 7.64 | 6.21 | 5.42 | 4.30 | 3.65 | 1.92 |
| 1.70V/cell | 103.0 | 74.3 | 58.2 | 46.2 | 35.0 | 26.1 | 20.6 | 12.8 | 9.66 | 7.84 | 6.38 | 5.53 | 4.36 | 3.68 | 1.95 |
| 1.67V/cell | 113.5 | 80.2 | 61.9 | 49.1 | 36.9 | 26.7 | 21.3 | 13.1 | 10.1 | 8.12 | 6.55 | 5.65 | 4.43 | 3.76 | 1.98 |
| 1.60V/cell | 125.2 | 87.1 | 66.2 | 52.3 | 39.0 | 27.9 | 22.0 | 13.6 | 10.4 | 8.37 | 6.77 | 5.77 | 4.48 | 3.80 | 1.99 |

| Constant Power Discharge Characteristics: Wpc (25°C) | | | | | | | | | | | | | | | |
|--|-------|--------|--------|--------|--------|--------|------|------|------|------|------|------|------|-------|-------|
| F.V/Time | 5 Min | 10 Min | 15 Min | 20 Min | 30 Min | 45 Min | 1Hr | 2 Hr | 3 Hr | 4 Hr | 5 Hr | 6 Hr | 8 Hr | 10 Hr | 20 Hr |
| 1.85V/cell | 113.0 | 89.7 | 77.1 | 65.1 | 52.3 | 39.9 | 32.8 | 21.1 | 16.7 | 13.7 | 11.1 | 9.66 | 7.88 | 6.75 | 3.73 |
| 1.80V/cell | 150.0 | 113.3 | 91.9 | 75.9 | 60.8 | 46.1 | 36.6 | 22.8 | 17.9 | 14.5 | 11.8 | 10.3 | 8.33 | 7.14 | 3.76 |
| 1.75V/cell | 165.5 | 122.5 | 99.1 | 80.8 | 62.6 | 47.4 | 38.1 | 23.6 | 18.1 | 14.8 | 12.1 | 10.6 | 8.45 | 7.20 | 3.79 |
| 1.70V/cell | 177.2 | 130.5 | 104.4 | 84.3 | 64.8 | 49.1 | 39.2 | 24.5 | 18.6 | 15.2 | 12.4 | 10.8 | 8.56 | 7.26 | 3.86 |
| 1.67V/cell | 192.7 | 139.5 | 110.1 | 88.9 | 67.8 | 49.9 | 40.2 | 25.0 | 19.3 | 15.6 | 12.7 | 11.0 | 8.68 | 7.40 | 3.91 |
| 1.60V/cell | 207.6 | 148.0 | 115.8 | 93.7 | 71.1 | 51.7 | 41.4 | 25.7 | 19.8 | 16.1 | 13.1 | 11.2 | 8.74 | 7.47 | 3.92 |

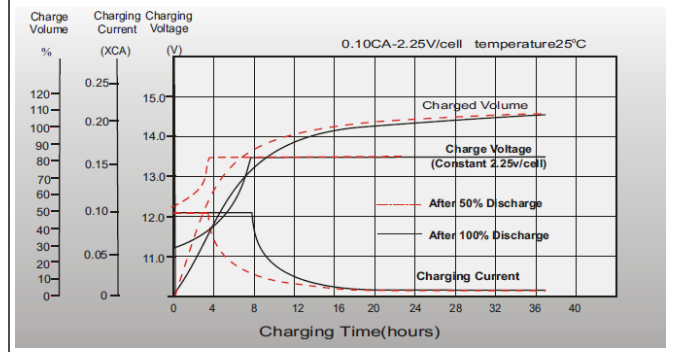


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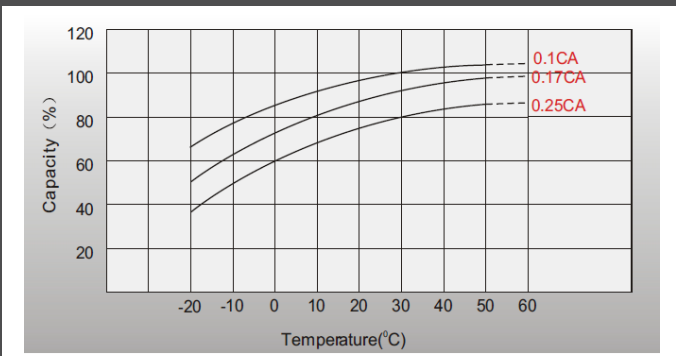
Discharge Characteristics



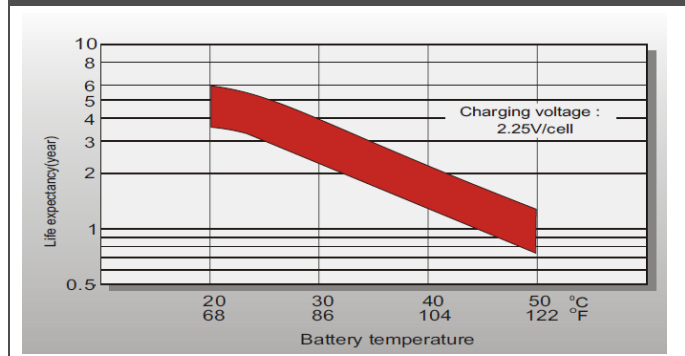
Float Charging Characteristics



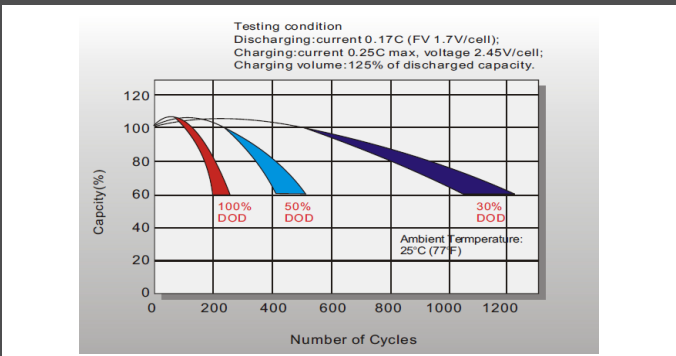
Temperature Effects In Relation To Battery Capacity



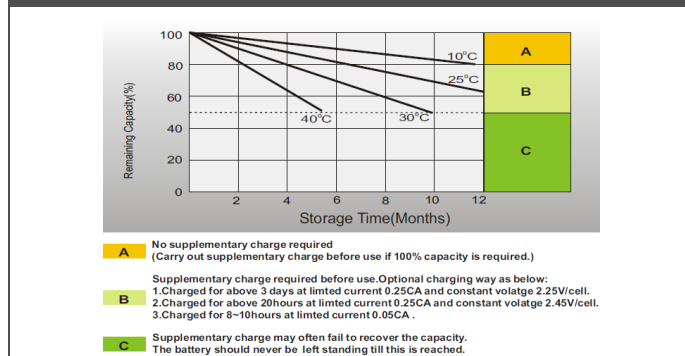
Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics



Applications

- All purpose
- Uninterruptable Power Supply (UPS)
- Electric Power System (EPS)
- Emergency backup power supply
- Emergency light
- Railway signal
- Aircraft signal
- Alarm and security system
- Electronic apparatus and equipment
- Communication power supply
- DC power supply
- Auto control system

(Note) All above information shall be changed without prior notice, Landport Batteries reserves the right to explain and update the latest information.