

LFPG1290 (12V90 Ah)

Specifications

| | | |
|--|--------------|--|
| Nominal Voltage | | 12 V |
| Capacity (25°C) | 20HR(10.5V) | 90 Ah |
| | 5HR(10.2V) | 70 Ah |
| | 1HR(9.6V) | 52.4Ah |
| Dimension | Length | 306mm ± 2 (12.05inch) |
| | Width | 169mm ± 2 (6.65inch) |
| | Height | 214mm ± 2 (8.43inch) |
| | Total Height | 214mm ± 2 (8.43inch) |
| Approx. Weight | | 28.5kg (62.7lbs) ± 4% |
| Terminal type | | T9 |
| Internal resistance (Fully charged, 25°C) | | Approx. 5.8m Ω |
| Capacity affected by temperature (10HR) | 40°C | 103% |
| | 25°C | 100% |
| | 0°C | 88% |
| | -15°C | 70% |
| Self-discharge (25°C) | 3 month | Remaining Capacity: 94% |
| | 6 month | Remaining Capacity: 88% |
| | 12 month | Remaining Capacity: 75% |
| Nominal operating temperature | | 25°C ± 3°C (77°F ± 5°F) |
| Operating temperature range | Discharge | -15°C ~ 55°C (5°F ~ 131°F) |
| | Charge | -10°C ~ 55°C (14°F ~ 131°F) |
| | Storage | -20°C ~ 55°C (-4°F ~ 131°F) |
| Float charging voltage(25°C) | | 13.50 to 13.80V Temperature compensation: -18mV/°C |
| Cyclic charging voltage(25°C) | | 14.10 to 14.40V Temperature compensation: -30mV/°C |
| Maximum charging current | | 18 A |
| Terminal material | | Copper |
| Maximum discharge current | | 900A(5 sec.) |
| Designed floating life(20°C) | | 15 years |

- ◆ Gelled electrolyte technology;
- ◆ PVC separator;
- ◆ Recognized by UL & CE;
- ◆ ABS container.

Constant Current Discharge Characteristics (A, 25°C)

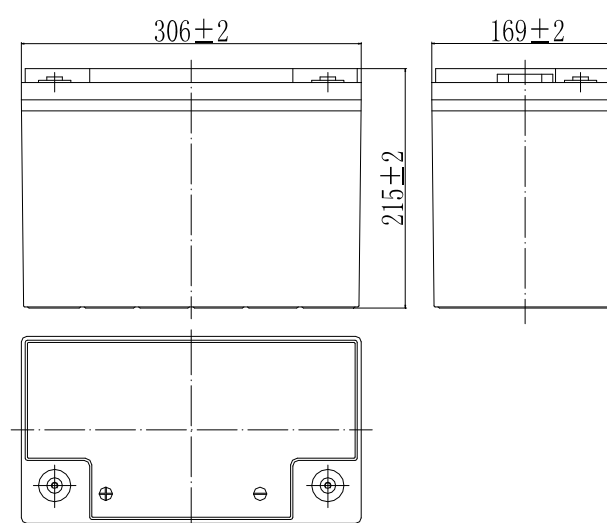
| F.V/TIME | 15min | 30min | 60min | 2h | 3h | 4h | 5h | 6h | 8h | 10h | 20h | 48h | 120h |
|----------|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|
| 9.60V | 122 | 83.9 | 52.4 | 30.6 | 21.6 | 17.0 | 14.2 | 12.2 | 9.45 | 8.43 | 4.60 | --- | --- |
| 9.90V | 119 | 82.2 | 51.6 | 30.4 | 21.4 | 16.9 | 14.1 | 12.1 | 9.36 | 8.42 | 4.59 | --- | --- |
| 10.2V | 114 | 79.7 | 50.3 | 30.2 | 21.3 | 16.7 | 14.0 | 12.0 | 9.36 | 8.39 | 4.58 | 2.01 | --- |
| 10.5V | 111 | 77.8 | 49.3 | 29.7 | 21.2 | 16.7 | 14.0 | 11.9 | 9.27 | 8.33 | 4.50 | 2.00 | 0.83 |
| 10.8V | 104 | 74.9 | 47.8 | 29.0 | 20.5 | 16.1 | 13.5 | 11.5 | 8.99 | 8.28 | 4.50 | 2.00 | 0.83 |

Constant Power Discharge Characteristics (Watt, 25°C)

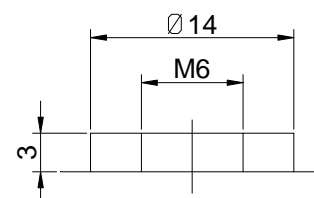
| F.V/TIME | 15min | 30min | 60min | 2h | 3h | 4h | 5h | 6h | 8h | 10h | 20h | 48h | 120h |
|----------|-------|-------|-------|-----|-----|-----|-----|-----|-----|------|------|------|------|
| 9.60V | 1356 | 956 | 603 | 356 | 255 | 201 | 169 | 144 | 113 | 101 | 55.4 | --- | --- |
| 9.90V | 1323 | 937 | 594 | 354 | 254 | 200 | 168 | 143 | 113 | 101 | 55.4 | --- | --- |
| 10.2V | 1274 | 908 | 580 | 351 | 252 | 198 | 167 | 142 | 112 | 101 | 55.2 | 24.1 | --- |
| 10.5V | 1231 | 887 | 568 | 346 | 250 | 197 | 166 | 141 | 111 | 99.9 | 54.3 | 23.9 | 9.99 |
| 10.8V | 1166 | 854 | 550 | 337 | 242 | 191 | 161 | 137 | 107 | 99.0 | 54.5 | 23.9 | 9.90 |

Note: The above characteristics data can be obtained within three charge/discharge cycles.

Dimensions



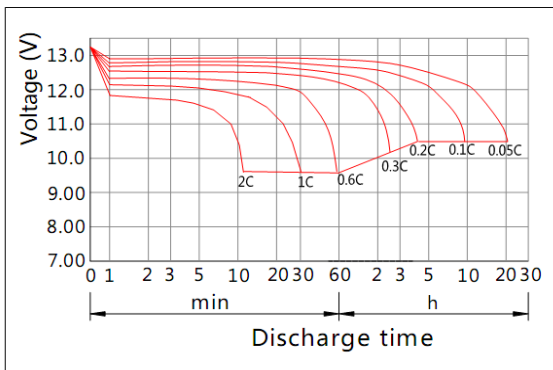
Terminal



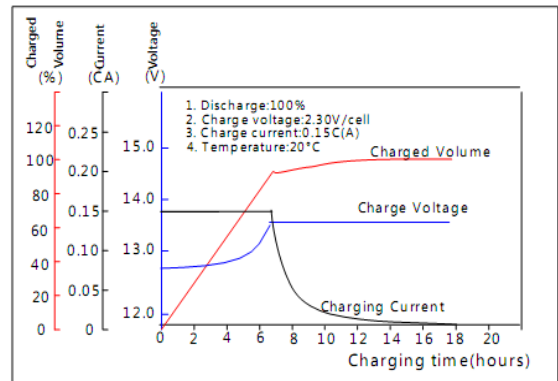
Terminal T9

LFPG1290 (12V90 Ah)

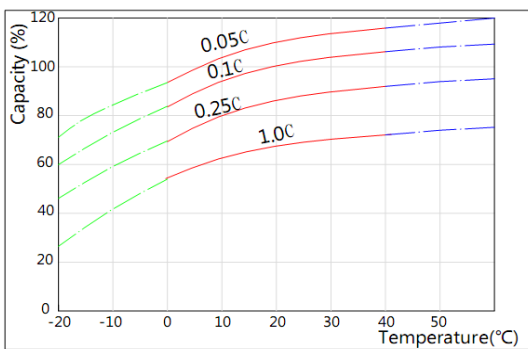
Discharge Characteristics(25°C)



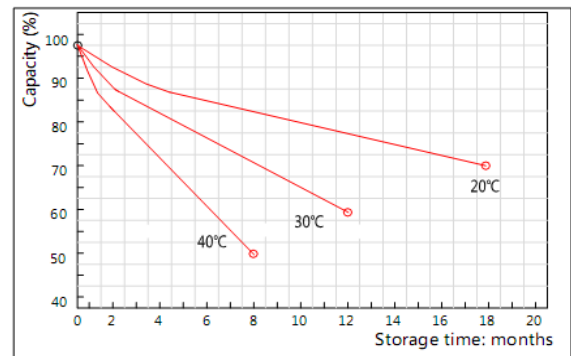
Charging Characteristics(25°C)



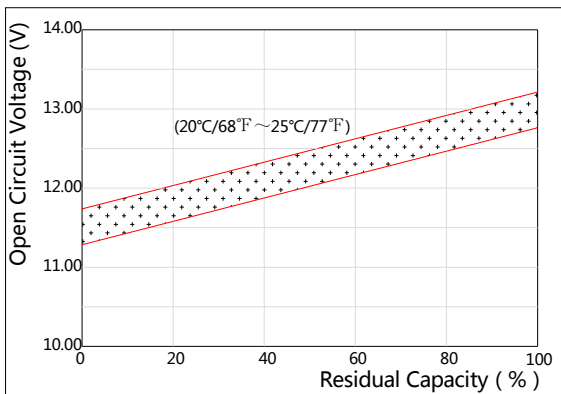
Effect of Temperature on Capacity



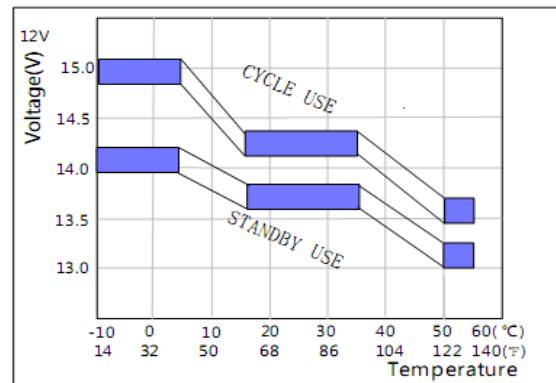
Self-discharge Characteristics



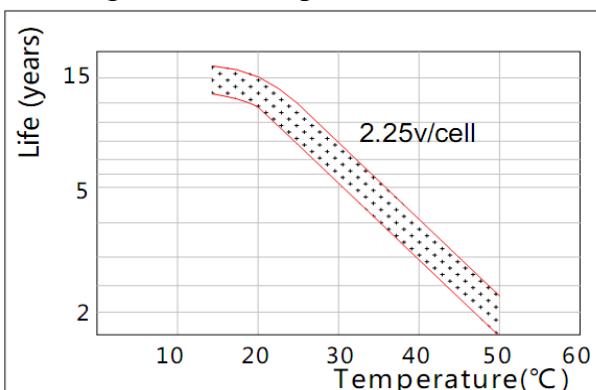
The Relationship for Open Circuit Voltage and Residual Capacity (25°C)



The Relationship for Charging Voltage and Temperature



Floating Life on Temperature



Cycle Life on D.O.D(25°C)

