

EPL-FTNG series are batteries with **over 12 years** of the design life at 20°C - according to Eurobat (10 years at 25°C), made in the **gel technology**. They have front terminals and a special case construction that allows them to be mounted in 19" and 23" cabinets. The EPL FTNG series is equipped with a **Central Degassing System**, consisting of a small conduit which can lead the small amount of gas liberated during operation outside the sealed cabinet in which the batteries are installed. EPL FTNG batteries have repeatable parameters and excellent discharge characteristics and this is why they are very often and readily used for the standby use in important telecommunication systems. Owing to the gel technology they are very often used for outdoor systems prone to large operating temperature changes.



TECHNICAL DATA

| | | |
|---|--|-----------------------------|
| Nominal voltage | 12 V | |
| Nominal capacity | 100 Ah / C ₁₀ | |
| Cell per unit | 6 | |
| Technology | GEL | |
| Design life | over 12 years @ 20°C* 10 years @ 25°C | |
| Dimensions | height | 287,0 mm |
| | length | 390,0 mm |
| | width | 105,0 mm |
| Weight | ~33,0 kg | |
| | ~106,6 Ah | |
| Capacity @ 25°C | 20h | 5,33A @1,80V/cell. |
| | 10h | 10,0A @1,80V/cell. |
| | 5h | 18,5A @1,75V/cell. |
| | 1h | 68,7A @1,60V/cell. |
| Ambient nominal temperature range | charge | 0°C ~ 40°C |
| | discharge | -40°C ~ 50°C |
| | storage | -20°C ~ 40°C |
| Internal resistance | @ fully charge battery | ≤6,36 mΩ |
| Charging voltage @ 20°C | standby use | 13,5V do 13,8V (-18 mV/°C) |
| | cycle use | 14,4 V do 15,0V (-24 mV/°C) |
| Charging current | recommended | 10 A |
| | maximum | 25 A |
| Capacity retention during storage @ 20°C (self discharge) | after 1 month | 98 % |
| | after 6 months | 86 % |
| | after 12 months | 73 % |
| Container material | standard | ABS UL 94-HB |
| | optional | ABS UL 94-V0** |
| Terminal | insert terminal | I2 |
| Terminal hardware initial torque | | 5,5 Nm |

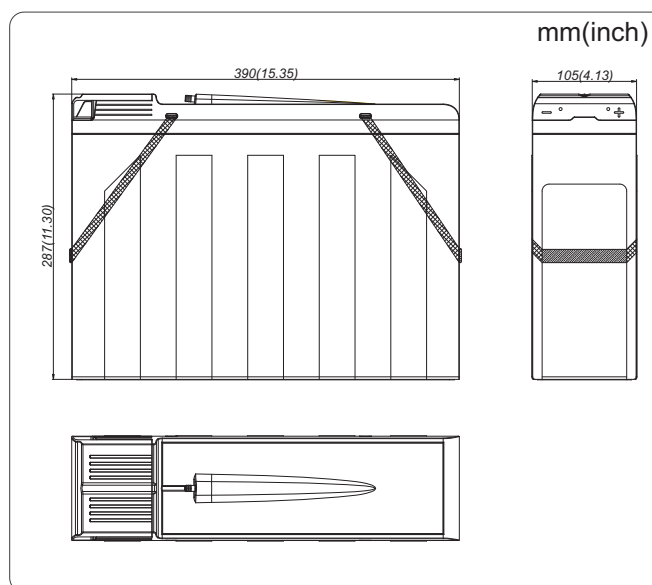
*) - According to Eurobat (Very Long Life group)

**) - Flame-retardant

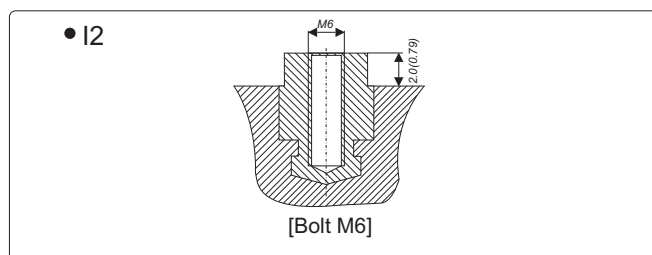
APPLICATIONS

- uninterruptible power supplies (UPS)
- emergency lighting systems
- telecommunication power plants
- telecommunication PABX
- GSM base stations
- server rooms

DIMENSIONS



TERMINALS



NO TRANSPORT RESTRICTED

Not restricted for air, surface and water transport. Classified as non-hazardous material (IATA/ICAO Special Provision A67, DOT-CFR Title 49 parts 171-189, IMDG amendment 27)

DISCHARGE CHARACTERISTICS

• Constant current (Current [A], 25°C / 77°F)

| F.V. V/cell | Discharge time | | | | | | | | | | |
|----------------|----------------|--------|--------|--------|------|------|------|------|------|------|------|
| | 5 min | 15 min | 30 min | 45 min | 1h | 3h | 5h | 6h | 8h | 10h | 20h |
| 1,85 | 246,0 | 147,4 | 98,2 | 74,0 | 60,3 | 25,8 | 17,1 | 14,7 | 11,5 | 9,54 | 5,22 |
| 1,80 | 275,9 | 165,3 | 107,6 | 79,7 | 65,1 | 27,4 | 18,1 | 15,6 | 12,2 | 10,0 | 5,33 |
| 1,75 | 307,8 | 177,3 | 112,5 | 83,1 | 66,8 | 27,6 | 18,5 | 15,9 | 12,3 | 10,1 | 5,39 |
| 1,70 | 334,7 | 183,3 | 113,5 | 83,7 | 67,8 | 27,9 | 18,6 | 16,0 | 12,4 | 10,2 | 5,40 |
| 1,67 | 337,6 | 186,3 | 115,5 | 84,3 | 68,3 | 28,1 | 18,9 | 16,2 | 12,4 | 10,2 | 5,41 |
| 1,60 | 359,6 | 193,2 | 117,5 | 85,0 | 68,7 | 28,6 | 19,0 | 16,3 | 12,5 | 10,3 | 5,46 |

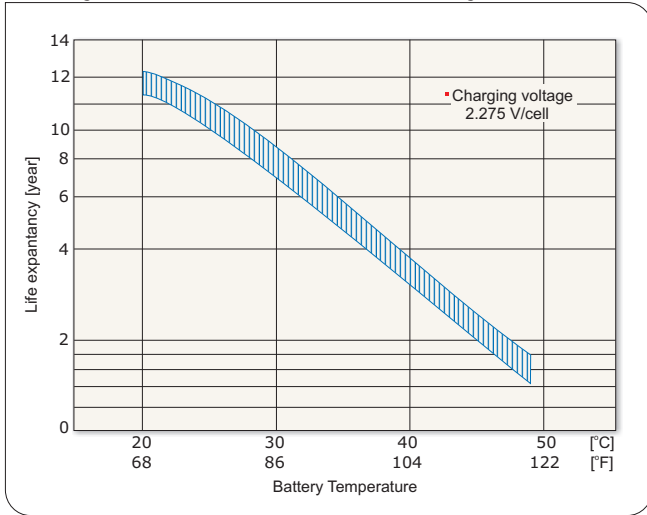
• Constant power (Power [W/cell], 25°C / 77°F)

| F.V. V/cell | Discharge time | | | | | | | | | | |
|----------------|----------------|--------|--------|--------|-------|------|------|------|------|------|------|
| | 5 min | 15 min | 30 min | 45 min | 1h | 3h | 5h | 6h | 8h | 10h | 20h |
| 1,85 | 441,1 | 277,4 | 187,6 | 143,7 | 116,9 | 50,3 | 33,7 | 29,1 | 22,8 | 18,9 | 10,5 |
| 1,80 | 494,0 | 310,4 | 204,6 | 154,7 | 125,9 | 53,0 | 35,3 | 30,6 | 23,7 | 19,6 | 10,7 |
| 1,75 | 537,9 | 328,3 | 209,6 | 157,7 | 126,9 | 53,1 | 35,9 | 30,9 | 23,8 | 19,6 | 10,7 |
| 1,70 | 576,8 | 330,3 | 210,6 | 158,7 | 128,9 | 53,7 | 35,9 | 31,0 | 24,0 | 19,6 | 10,7 |
| 1,67 | 579,8 | 334,3 | 210,6 | 158,7 | 128,9 | 53,7 | 36,4 | 31,2 | 24,2 | 19,8 | 10,7 |
| 1,60 | 602,8 | 340,3 | 212,6 | 159,7 | 129,9 | 54,4 | 36,4 | 31,4 | 24,3 | 20,0 | 10,8 |

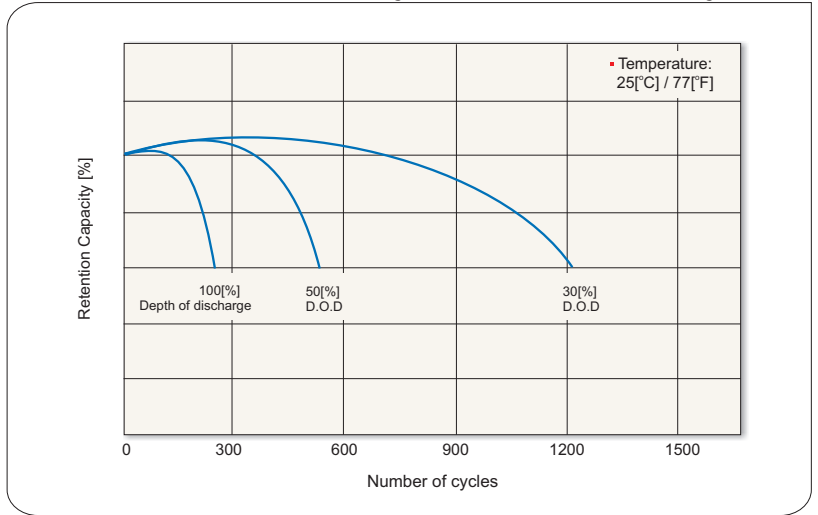
F.V. - Final voltage

EPL 100 - 12 FTNG

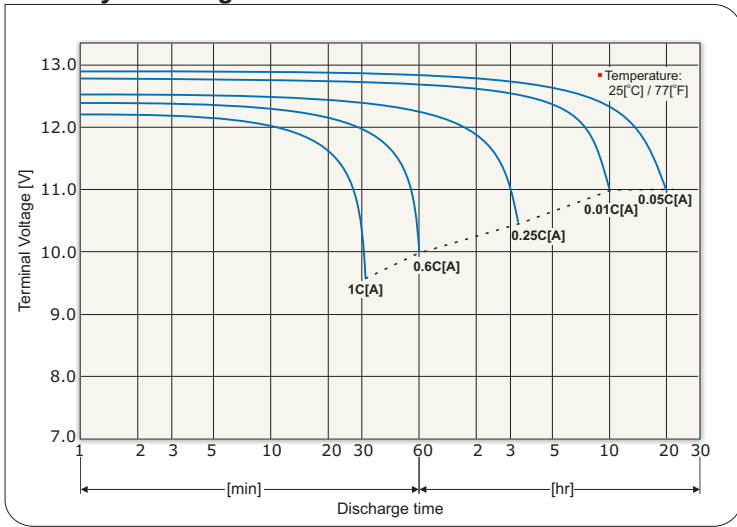
Battery life characteristics of standby use



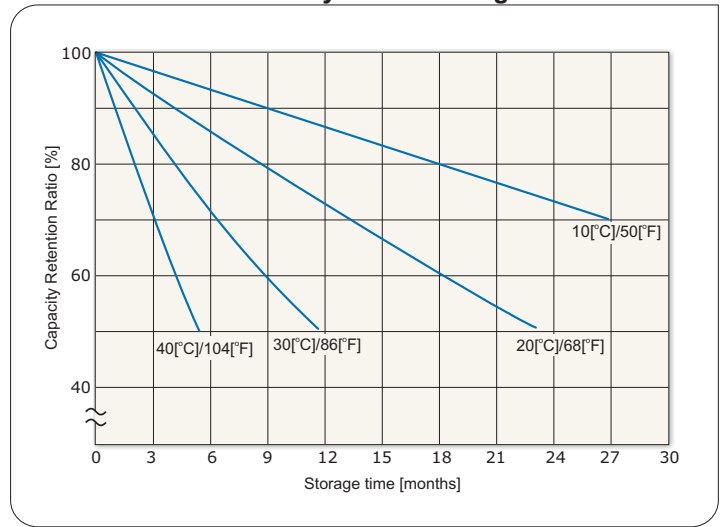
Battery life characteristics of cycle use



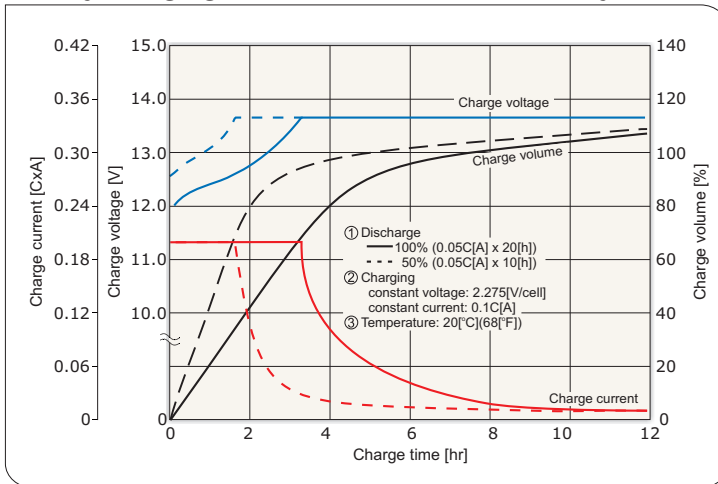
Battery discharge characteristics



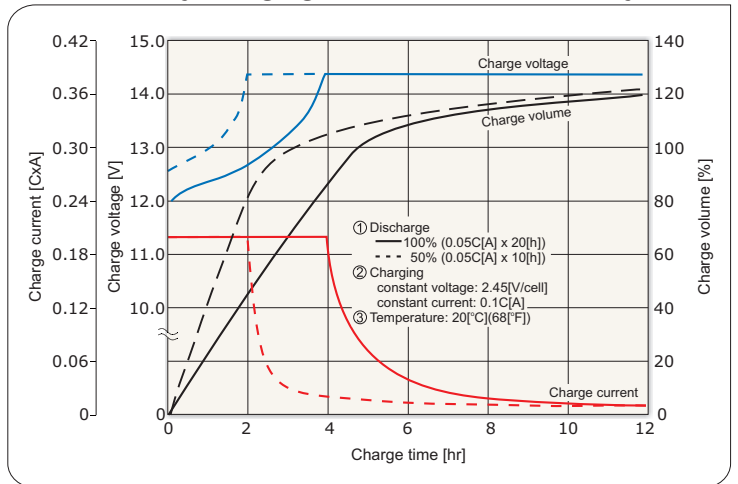
Battery self discharge characteristics



Battery charging characteristics for the standby use



Battery charging characteristics for the cycle use



Battery discharge current and final discharge voltage

| Discharge current [A] | 0.2C > I | 0.2C ≤ I < 0.5C | 0.5C ≤ I < 1.0C | 1.0C ≤ I |
|----------------------------------|----------|-----------------|-----------------|----------|
| Final discharge voltage [V/cell] | 1.75 | 1.70 | 1.55 | 1.30 |

*) C - Capacity

