



Applications and Key Benefits

- + 12V AGM blocs with gel, designed for high energy density front terminal telecom installations
Ideal for:
 - Telecom BTS - wireless application
 - Outdoor wireline cabinets
 - Broadband, microwave repeater and fiber optic regeneration sites
 - Use in areas with stable on-grid power supply
- + Suitable for discharge 30 min up to 10 hours
- + With gel, for extended life and resistance with use at elevated temperature
- + Front terminal design for reduced headspace, higher energy density and compact battery layout
- + Front terminal design reduces installation time and facilitates maintenance
- + 19 or 23 inch and ETSI power racks / cabinets
- + Minimal gassing and fit for remote venting
- + Non-spillable
- + Maintenance free without topping-up
- + Non-hazardous for air/sea/rail/ road transportation
- + 100% Recyclable



Applicable Standards

- IEC 60896 Part 21 - VRLA methods of testing
- IEC 60896 Part 22 - VRLA requirements
- BS 6290 Part 4 - specifications for VRLA classification
- Eurobat "Long Life" - 12 years and longer
- UL Recognized

FIAMM Manufacturing

- ISO 9001 Quality Management System
- ISO 14001 Environmental Management System
- OHSAS 18001 – Workplace Safety and Health

Technical Features

- Pasted plates and grids of high quality lead-tin-calcium alloy
- Electrolyte fully absorbed in glass mat AGM separators with extremely high porosity
- ABS IEC 707 FV0 and UL 94 V0 (LOI greater than 28%) flame retardant plastics
- Container and lid designed for unsurpassed mechanical strength made of thick walled plastics
- Thermally welded case-to-cover sealing avoids leakage
- Threaded terminal posts with brass inserts guarantee highest conductivity, maximum torque retention and easy installation
- High integrity post seal design to prevent electrolyte leakage over a wide temperature range
- Flame arrestors prevent sparks or flames from entering the battery
- Heavy-duty internal straps and through-the-partition cell connections minimize internal resistance
- Fully insulated removable terminal covers with probe hole for safe and easy voltage measurement
- Robust connectors for use also in high rate application
- Design allows connections to the top, the front or the side
- Lids have space for end-battery connection cables
- All models have removable rope handles
- Cells equipped with one-way safety valves to allow excess gas to escape when overcharging
- Remote venting system available for applications which require limited gassing to be vented externally
- < 2% self-discharge per month at 20°C allows 6 months shelf life

FTX

FIAMM FTX range

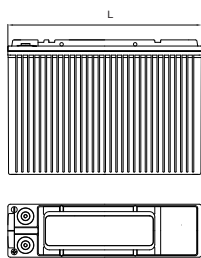
| BATTERY TYPE | NOMINAL VOLTAGE (V) | CAPACITY (Ah) at 20°C 10 hrs to 1.80 VPC | SHORT CIRCUIT CURRENT (A) IEC 60896 21-22 | INTERNAL RESISTANCE (mOhm) IEC 60896 21-22 | DIMENSIONS (mm) | | | WEIGHT (kg) | TERMINAL TYPE |
|---------------|---------------------|---|--|---|-----------------|-------|--------|-------------|---------------|
| | | | | | Length | Width | Height | | |
| 12 FTX 60 | 12 | 60 | 1998 | 6.3 | 280 | 105 | 260 | 21.4 | Female M6 |
| 12 FTX 100/19 | 12 | 100 | 2421 | 5.2 | 395 | 108 | 287 | 33.5 | Female M6 |
| 12 FTX 100/M | 12 | 100 | 2379 | 5.2 | 518 | 105 | 245 | 34.8 | Female M6 |
| 12 FTX 100/23 | 12 | 100 | 2776 | 4.5 | 558 | 125 | 230 | 37.9 | Female M8 |
| 12 FTX 150 | 12 | 150 | 2950 | 4.1 | 558 | 125 | 282 | 50.3 | Female M8 |
| 12 FTX 180 | 12 | 180 | 3063 | 4.0 | 558 | 125 | 320 | 58.6 | Female M8 |

Note: dimension have a natural tolerance of ± 2 mm

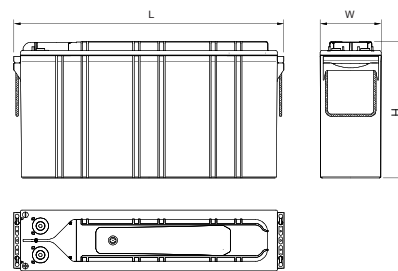
Electrical Characteristics

- ✦ FLOAT VOLTAGE CHARGE FOR STANDBY USE: 13.62 V/bloc (2.27 V/cell) at 20°C,
13.56 V/bloc (2.26 V/cell) at 25°C
- ✦ BOOST CHARGE: 14.1–14.4 V/bloc (2.35–2.40 V/cell)
- ✦ MAXIMUM CHARGE CURRENT: 0.25 C₁₀A (i.e. for a 100Ah bloc maximum charge current is 25 Amps)
- ✦ FLOAT VOLTAGE TEMPERATURE COMPENSATION: -15 mV/°C/bloc
- ✦ SELF-DISCHARGE AT 20°C: < 2% / month
- ✦ WARNING: in order for the warranty to be valid in all critical, frequent discharge and hybrid applications, please coordinate with Fiamm Group to clarify required operating and charging settings

Dimensions



12FTX60-100/19-100/M



12FTX100/23-150-180

FIAMM Energy Technology S.p.A. reserves the right to change or revise without notice any information or detail given in this publication
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