



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



FIAMM FTX range

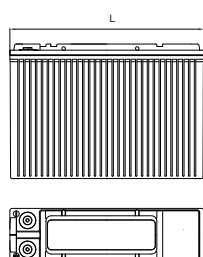
BATTERY TYPE	NOMINAL VOLTAGE (V)	CAPACITY (Ah) at 20°C 10 hrs to 1.80 VPC	SHORT CIRCUIT CURRENT (A) IEC 60896 21-22	INTERNAL RESISTANCE (mOhm) IEC 60896 21-22	DIMENSIONS (mm)			WEIGHT (kg)	TERMINAL TYPE
					Length	Width	Height		
12 FTX 60	12	60	1998	6.3	280	105	260	21.4	Female M6
12 FTX 90	12	90	2327	5.4	395	108	275	32.9	Female M8
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

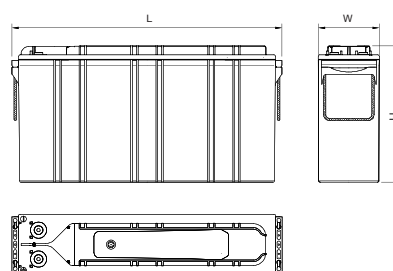
Electrical Characteristics

- ✦ 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



12 FTX 60-90-100/19-100/M



12 FTX 100/23-150-180