

FLB

FIAMM

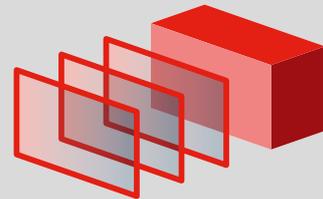
Unsurpassed high-rate performance AGM battery

LONG
DESIGN
LIFE

99%
RECY
CLABLE



AGM
technology



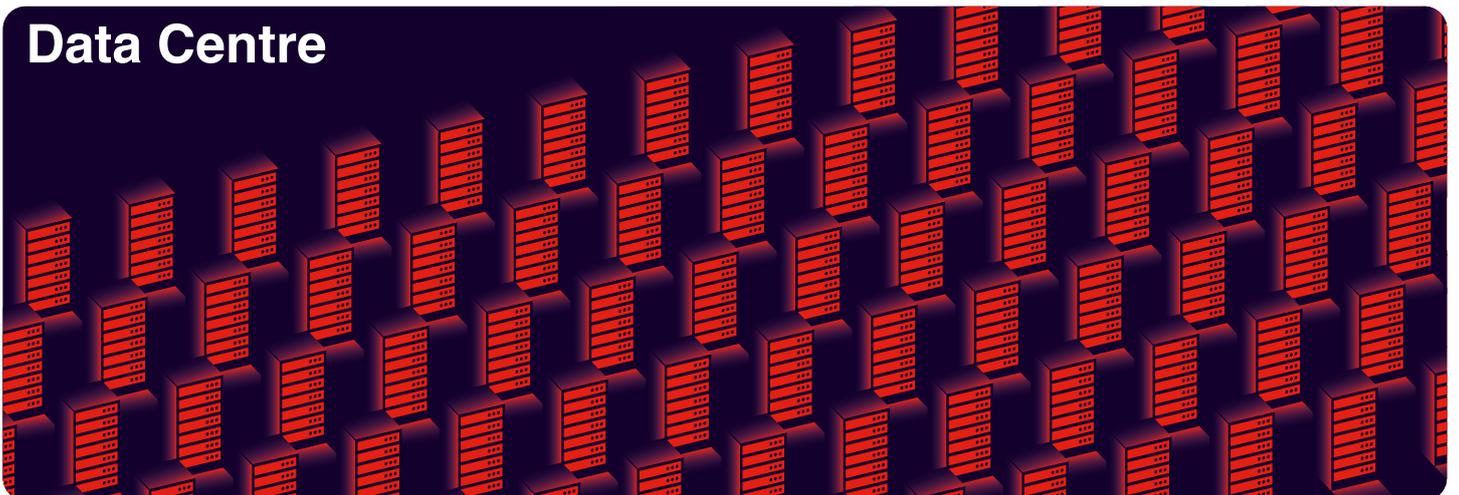
High-rate
performance



Flame
retardant
casing



Data Centre



FLB

10/12 years design life enclosed in a rugged flame retardant ABS case and available with top and front terminal designs.

The FLB is one of our most popular battery and is used extensively in many applications including UPS backup power. The battery is designed to deliver the highest levels of performance. The high energy density construction in a compact design also helps to reduce costly installation space.

The exterior construction uses a Flame retardant ABS plastic to UL94 V0 that guarantees a high level of safety and superior thermal stability

to avoid case bulging.

The FLB range is based on AGM VRLA technology and it is 99% recyclable at the end of life. The battery is fully maintenance-free and requires no routine topping-up of the electrolyte. The range carries a non-hazardous designation and can be transported by road, rail or air. The design has been optimized to lower self-discharge during storage.

Battery type	Nominal voltage (V)	Nominal power (W/cell) 15MIN 1.67VPC 25°C	Nominal capacity (Ah) 10H 1.80VPC 25°C	Nominal capacity (Ah) 20H 1.75VPC 25°C	Nominal dimension (mm)			Typical weight (kg)
					Length	Width	Height	
12FLB100P	12	103	24	26	166	175	126	8.5
12FLB150P	12	156	44	48	198	166	170	14
12FLB200P	12	204	53	57	230	140	212	17
12FLB250P	12	257	75	80	260	168	214	24
12FLB300P	12	311	78	84	261	174	217	26
12FLB350P	12	374	90	95	302	174	217	30
12FLB400P	12	415	101	109	341	174	217	34
12FLB450P	12	477	115	124	379	174	217	38
12FLB540P	12	540	140	150	338	174	277	49
12FLB700P	12	710	200	216	558	126	321	61

Standards

IEC 60896 Part 21 - VRLA methods of testing

IEC 60896 Part 22 - VRLA requirements

BS6334 / UL 94 V0 materials flammability

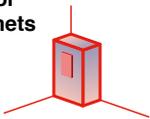
Eurobat "10/12 years LONG LIFE" for top terminal models

Eurobat ">12 years VERY LONG LIFE" for front terminal models

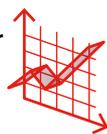
UL recognized

Solutions & accessories

Indoor cabinets



Smart Logger



RVS



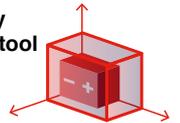
Protection boxes



Racks

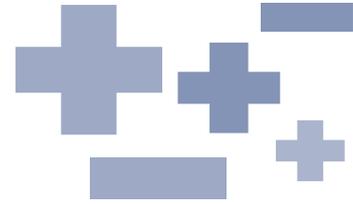


Battery sizing tool



BACS





Applications and Key Benefits

- + Designed to achieve optimal performance and to protect from power disturbances
ideal for:
 - high rate discharge UPS application
 - emergency power supply systems
 - IT network operations and data centers
 - emergency lighting
- + 12 volt monoblocs
- + Very high energy density allows more compact battery layout and footprint
- + Easy installation in cabinets or racks
- + Non-spillable
- + Flame retardant plastics
- + VRLA AGM and gas recombination technology with 99% internal recombination
- + Maintenance free without topping-up
- + Non-hazardous for air/sea/rail/ road transportation
- + 100% Recyclable

Applicable Standards

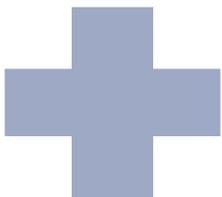
- IEC 60896 Part 21 - VRLA methods of testing
- IEC 60896 Part 22 - VRLA requirements
- BS 6290 Part 4 - specifications for VRLA classification
- Eurobat "High Performance" - 10-12 years

FIAMM Manufacturing

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

Technical Features

- Gravity casted grids with high purity lead calcium tin alloy
- Active material on both sides of the grids guarantees optimized performance
- Minimal grid growth and corrosion resistant for prolonged service life
- Electrolyte fully absorbed in glass mat "AGM" separators with extremely high micro porosity
- Threaded female M5/M6/M8 terminal posts guarantee highest conductivity, maximum torque retention and easy installation
- Leak-resistant post seals prevent acid seepage over a wide temperature range
- Cells equipped with one-way safety valves that open at 5 PSI and close at 3 PSI to allow excess gas to escape when overcharging
- Flame arrestors prevent sparks or flames from entering the battery
- 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
- < 2% self-discharge per month at 20°C allows 6 months shelf life
- Remote venting system available for applications which require limited gassing to be vented externally (available on 12FLB250 to 12FLB450)



HIGHLITE FLB

FIAMM FLB range

BATTERY TYPE	NOMINAL VOLTAGE (V)	CAPACITY at 25°C (Ah)	SHORT CIRCUIT CURRENT (A)	INTERNAL RESISTANCE (mOhm)	DIMENSIONS (mm)			WEIGHT (kg)	TERMINALS
		20 hrs to 1.75 VPC	IEC 60896 21-22	IEC 60896 21-22	Length	Width	Height		
12 FLB 100	12	26	768	16.4	166	175	125	9.35	M5/12
12 FLB 150	12	40	1270	9.8	197	165	170	14.0	M6/16
12 FLB 200	12	55	1550	8.3	229	138	212	18.5	M6/16
12 FLB 250	12	70	1975	6.5	272	166	195	23.5	M8/18
12 FLB 300	12	75	2620	4.8	261	174	218	27.0	M8/18
12 FLB 350	12	90	2430	5.2	302	174	218	31.0	M8/18
12 FLB 400	12	100	3260	3.8	341	174	218	34.5	M8/18
12 FLB 450	12	115	3870	3.2	379	174	218	38.5	M8/18
12 FLB 540	12	150	3660	3.4	338	174	277.5	44.5	M8/18
12 FLB 700	12	235	4480	2.8	260	500	235	75.0	M8/18

DISCHARGE WATTS PER CELL TO 1.67 V/CELL AT 25°C

BATTERY TYPE	MINUTES						
	5	10	15	20	30	45	60
12 FLB 100	186	126	103	86.1	65.4	47.4	37.4
12 FLB 150	286	201	156	127	93.9	68.3	53.4
12 FLB 200	354	256	204	167	125	91.9	73.4
12 FLB 250	489	339	257	207	152	108	86.8
12 FLB 300	557	397	311	254	186	134	106
12 FLB 350	669	477	374	305	224	161	128
12 FLB 400	743	530	415	339	248	179	142
12 FLB 450	855	609	477	390	286	206	163
12 FLB 540	874	658	540	449	341	249	195
12 FLB 700	935	883	735	600	451	334	273

Electrical Characteristics

- ✦ FLOAT VOLTAGE CHARGE AT 25°C: 2.26 V/cell
- ✦ BOOST CHARGE: 2.35 V/cell
- ✦ FLOAT VOLTAGE COMPENSATION WITH TEMPERATURE: -2.5 mV/°C per cell

FIAMM S.p.A.
Industrial Batteries
www.fiamm.com
email:info.standby@fiamm.com

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