

FLX



FLX Battery Range

FIAMM
+ -

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FIAMM.COM

F IAMM FLX RANGE OF VALVE REGULATED BATTERIES HAS BEEN DESIGNED TO DELIVER THE HIGHEST PERFORMANCES WHILST COMBINING EXCELLENT RELIABILITY AND FLOAT-LIFE.

FLX HIGH ENERGY DENSITY ALLOWS COMPACT BATTERY LAYOUT AND FOOTPRINTS, THIS REDUCING THE INSTALLATION SPACE. FLX BLOCS CAN BE INSTALLED IN CABINETS OR RACKS. FLX USES PROVEN VRLA TECHNOLOGY WITH 99% INTERNAL RECOMBINATION EFFICIENCY, IS NON-SPILLABLE AND MAINTENANCE FREE THEREFORE REQUIRES NO TOPPING UP OF ELECTROLYTE DURING ITS FLOAT- LIFE. FLX RANGE IS NON-HAZARDOUS FOR AIR/SEA/RAIL/ROAD TRANSPORTATION AND IS 100% RECYCLABLE. FLX HAS A SELF-DISCHARGE RATE LESS THAN 2% PER MONTH, GUARANTEEING LONG SHELF-LIFE.



MAIN APPLICATIONS:



UPS
&
DATA CENTER



SECURITY SYSTEM
&
EMERGENCY LIGHTING

SPECIFICATIONS

Special lead calcium tin alloy grid, designed to resist corrosion and provide short recharge time

VRLA AGM technology using low resistance high microporous fiberglass separators

Leak resistant post seal, threaded female terminals with high conductivity and maximum torque resistance

One-way safety relief valves allow gas to escape and prevent the ingress of oxygen.

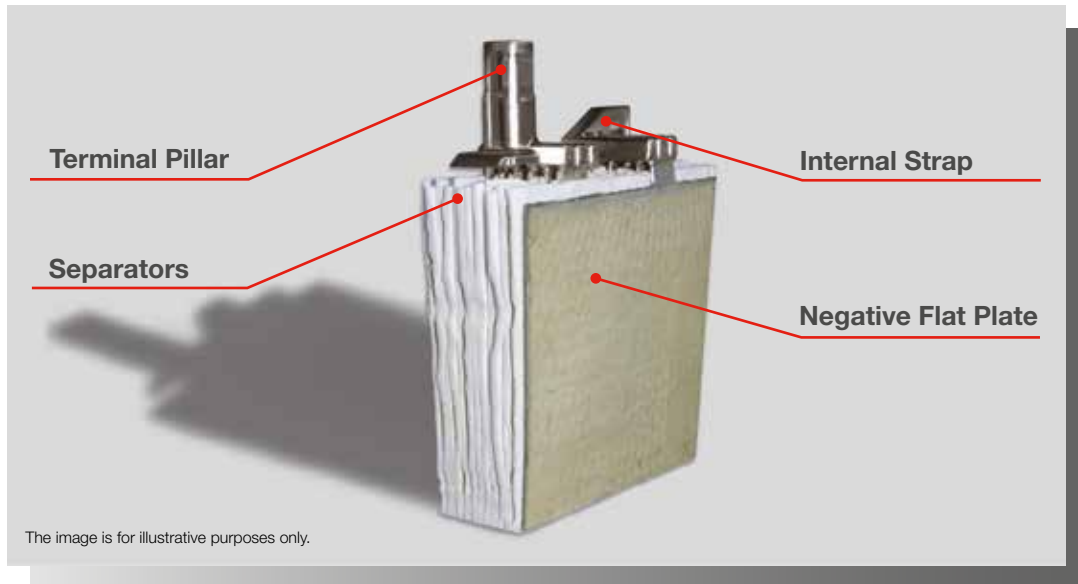
Flame arrestors prevent sparks or flames entering the battery

Flame retardant ABS plastic to IEC 707 FV0 and UL94 FV0 (LOI greater than 28%)

Heat sealed box to lid weld for superior integrity

Installation in any orientation (excluding permanently inverted)

TECHNOLOGY



FIAMM FLX RANGE USE AGM (ABSORBED GLASS MAT) TECHNOLOGY. THE ELECTROLYTE IS ABSORBED IN FIBERGLASS SEPARATORS WITH 99% INTERNAL GAS RECOMBINATION EFFICIENCY. BLOCs ARE GRANTS NON-SPILLABLE AND MAINTENANCE FREE THEREFORE REQUIRES NO TOPPING UP OF ELECTROLYTE DURING ITS WHOLE LIFE. LOW SELF-DISCHARGE ALLOWS 6 MONTHS SHELF LIFE.

BATTERY TYPE	NOMINAL VOLTAGE (V)	POWER (W/cell) 15 min to 1.67 VPC at 77°F	CAPACITY (Ah) 20 hrs to 1.75 VPC at 77°F	DIMENSIONS (in.)			WEIGHT (lbs)	Terminals
				Length	Width	Height		
12 FLX 100	12	101	28,6	6.53/6.42	5.16/5.07	6.77	21.4	10/32 - UNF
12 FLX 150	12	152	44	7.78/7.67	6.48/6.37	6.65	30.6	10/32 - UNF
12 FLX 200	12	225	60,5	9.06/8.90	5.43/5.34	8.35	39.2	1/4" - 20
12 FLX 300	12	340	82,5	10.27/10.16	6.85/6.57	8.58	58.3	1/4" - 20
12 FLX 350	12	390	99	11.87/11.76	6.85/6.57	8.58	67.5	1/4" - 20
12 FLX 400	12	415	110	13.31/12.74	6.85/6.57	8.46	73.3	1/4" - 20
12 FLX 500	12	502	132	13.31/12.74	6.85/6.57	10.87	93.6	1/4" - 20
12 FLX 540	12	540	154	13.31/12.74	6.85/6.57	10.87	98.0	1/4" - 20
12 FLX 700	12	702	198	21.97/20.98	4.96/4.92	12.64	134	Female M8

ELECTRICAL CHARACTERISTICS

Float Voltage: 2.26 V/cell at 77°F

Boost Voltage: 2.35 V/cell

Float Voltage Compensation with Temperature: -1.39 mV/cell/°F

Self-Discharge at 77°F: <2%/month

STANDARDS

UL Recognized

UL 1778 4th edition - UPS equipment certification

IEC 60896 Part 21 - VRLA methods of testing

IEC 60896 Part 22 - VRLA requirements

BS 6290 Part 4 - Specifications for VRLA classification

DISCHARGE DATA - POWER

Model	Constant Power Discharge Watt per cell to 1.67 Vpc at 77°F (25°C)							
	Minutes							
	5	10	15	20	30	45	60	90
12FLX100	186	131	101	83	61	42	35	24
12FLX150	279	196	152	124	92	63	52	36
12FLX200	400	300	225	180	140	100	83	58
12FLX300	570	445	340	278	221	161	122	84
12FLX350	660	520	390	315	232	175	138	97
12FLX400	740	550	415	342	262	195	156	112
12FLX500	814	613	502	418	318	232	181	128
12FLX540	910	740	540	485	355	262	215	152
12FLX700	1060	855	702	577	434	318	256	178

Model	Constant Power Discharge Watt per cell to 1.75 Vpc at 77°F (25°C)							
	Minutes							
	5	10	15	20	30	45	60	90
12FLX100	139	107	87.7	73.5	55.6	40.5	32.0	22.7
12FLX150	214	164	135	113	85.5	62.3	49.3	34.9
12FLX200	295	226	185	156	118	85.7	67.8	47.9
12FLX300	444	342	275	223	165	119	94.1	64.9
12FLX350	489	380	306	252	185	134	106	73.6
12FLX400	592	456	366	298	219	159	125	86.6
12FLX500	666	528	436	371	285	211	167	116
12FLX540	712	560	459	392	306	229	181	140
12FLX700	951	789	662	573	446	332	261	204

Model	Constant Power Discharge Watt per cell to 1.80 Vpc at 77°F (25°C)							
	Minutes							
	5	10	15	20	30	45	60	90
12FLX100	130	101	84.0	71.0	53.8	39.6	31.4	22.3
12FLX150	200	155	129	109	82.8	60.9	48.4	34.3
12FLX200	276	213	178	150	114	83.7	66.5	47.2
12FLX300	376	298	247	206	158	115	91.4	63.8
12FLX350	419	338	275	233	177	131	104	72.5
12FLX400	501	397	329	274	210	154	122	85.0
12FLX500	597	481	404	348	274	207	165	115
12FLX540	632	496	414	356	284	218	176	137
12FLX700	829	704	606	534	425	321	254	199

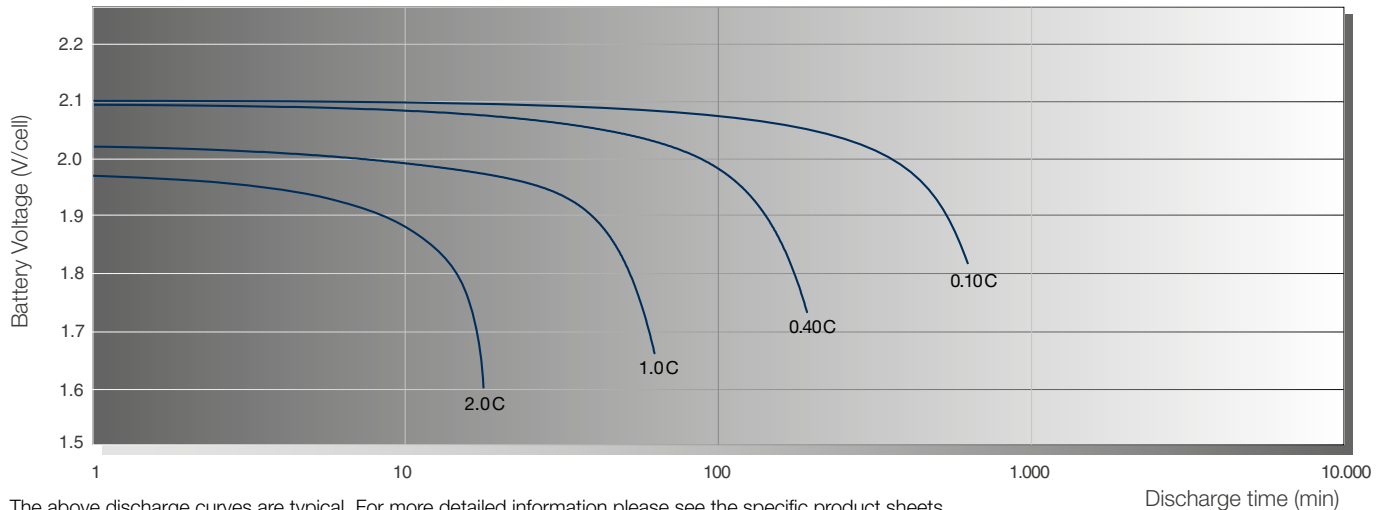
CERTIFICATIONS

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

ACCESSORIES

RVS
(remote venting system) for IP rated applications which require remote gassing
Rack for battery installation
(standard and seismic)
Cabinets for battery installation
(including electrical protections and disconnection)
Battery monitoring systems

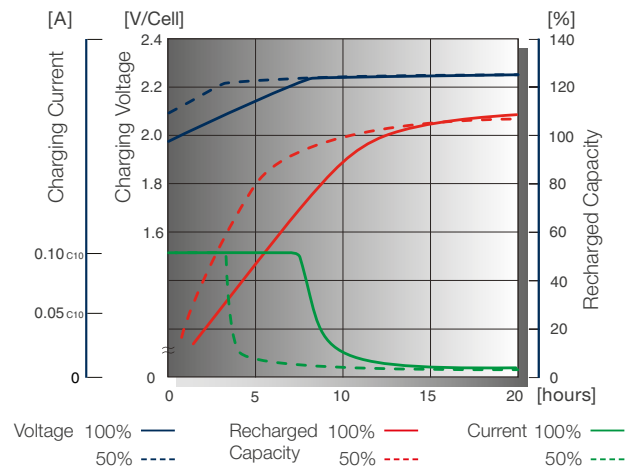
DISCHARGE CURVES at different current / final voltage (at 77°F)



The above discharge curves are typical. For more detailed information please see the specific product sheets.

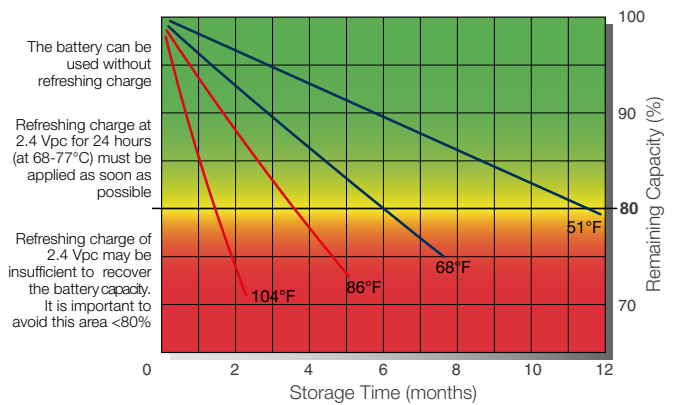
TYPICAL CHARGE CURVES

Battery Voltage and Charge Time for Standby Use (at 77°F)



STORAGE

Capacity loss during storage at various temperatures



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