

FLX



FLX Battery Range

FIAMM
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F IAMM FLX RANGE OF VALVE REGULATED BATTERIES HAS BEEN DESIGNED TO DELIVER THE HIGHEST PERFORMANCES WHILE 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:



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.

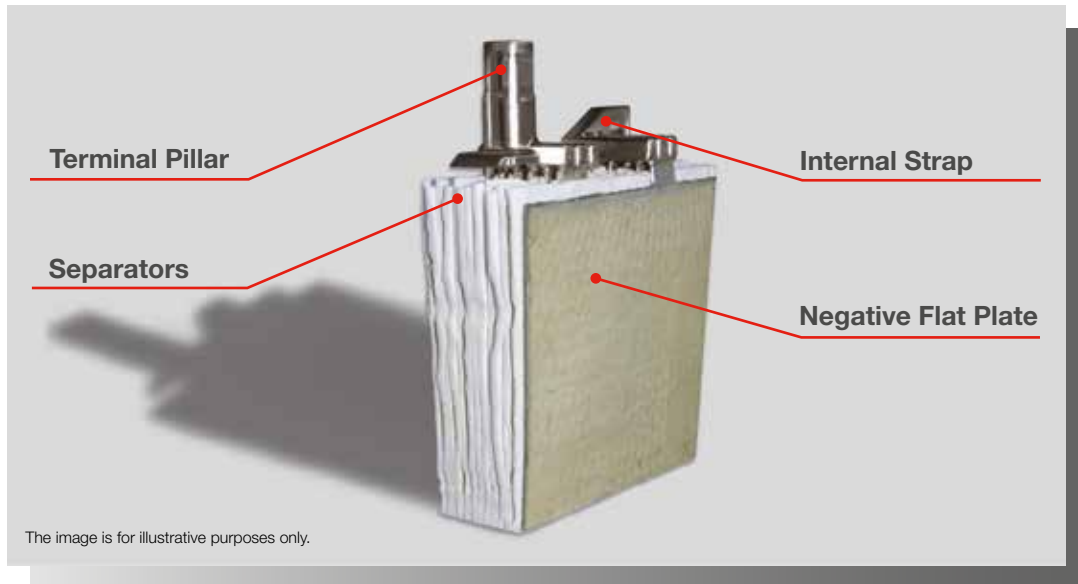
Flame arrestors prevent sparks or flames entering the battery

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 DESIGNED TO BE NON-SPILL ABLE 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	SHORT CIRCUIT CURRENT (A) IEC 60896 21-22	INTERNAL RESISTANCE (mOhm) IEC 60896 21-22	DIMENSIONS (in.)			WEIGHT (lbs)	Terminals
						Length	Width	Height		
12 FLX 200	12	204	55	1400	6.0	9.06/8.90	5.43/5.34	8.35	37.4	1/4" - 20
12 FLX 300	12	311	80	2600	4.7	10.27/10.16	6.85/6.57	8.58	58.3	1/4" - 20
12 FLX 350	12	374	95	3100	4.0	11.87/11.76	6.85/6.57	8.58	67.5	1/4" - 20
12 FLX 400	12	415	105	3400	3.6	13.31/12.74	6.85/6.57	8.46	73.3	1/4" - 20
12 FLX 500	12	502	132	3500	3.5	13.31/12.74	6.85/6.57	10.87	93.6	1/4" - 20
12 FLX 540	12	549	150	3660	3.4	13.31/12.74	6.85/6.57	10.87	98.0	1/4" - 20
12 FLX 700	12	712	210	4510	2.8	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: 2.40 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
12FLX200	354	256	204	167	125	91,9	73,4	49,7
12FLX300	557	397	311	254	186	134	106	72,8
12FLX350	669	477	374	305	224	161	128	87,4
12FLX400	743	530	415	339	248	179	142	97,1
12FLX500	842	634	502	408	299	216	170	117
12FLX540	919	692	549	453	332	240	188	130
12FLX700	1056	866	712	614	471	347	273	192

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
12FLX200	327	240	195	161	121	90,0	71,8	48,6
12FLX300	487	361	291	240	176	129	103	71,1
12FLX350	585	433	349	288	211	154	123	85,3
12FLX400	649	481	387	319	234	172	137	94,8
12FLX500	792	604	482	393	290	210	165	114
12FLX540	865	660	526	437	323	234	184	127
12FLX700	975	809	679	588	457	340	268	189

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
12FLX200	285	217	176	148	113	84,7	67,2	46,6
12FLX300	418	323	263	219	164	122	99,8	69,3
12FLX350	502	387	315	263	196	147	120	83,2
12FLX400	557	430	350	292	218	163	133	92,4
12FLX500	715	559	451	370	277	201	159	111
12FLX540	781	610	492	411	308	224	176	123
12FLX700	850	722	621	548	436	329	260	184

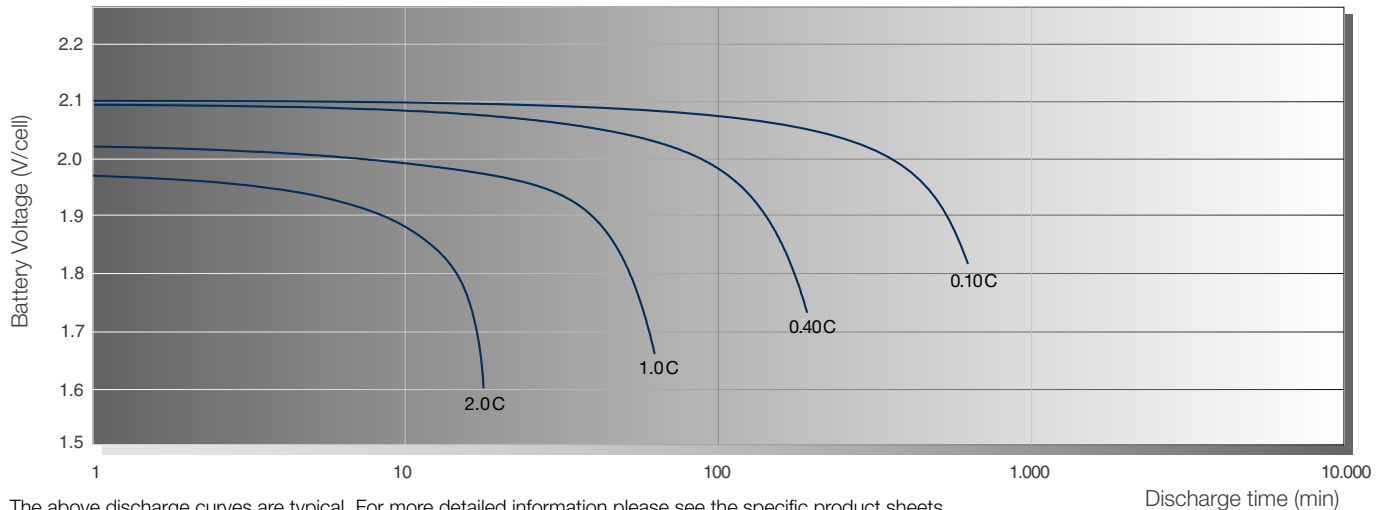
CERTIFICATIONS

ISO 9001
Quality Management System
ISO 14001
Environmental Management System
ISO 45001
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

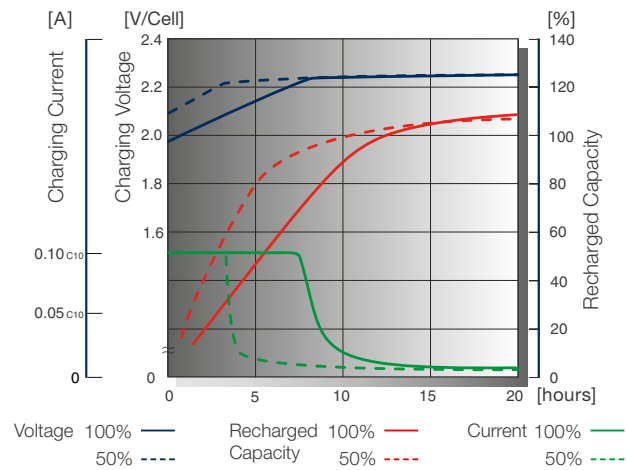
DISCHARGE CURVES at different current / final voltage (at 77°F)



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

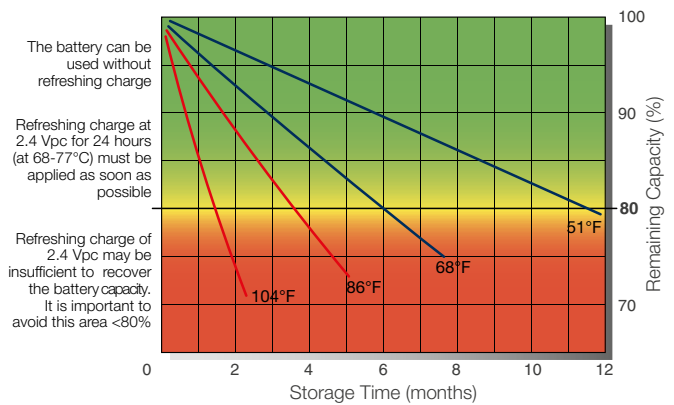
TYPICAL CHARGE CURVES

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



STORAGE

Capacity loss during storage at various temperatures



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