

FIAMM



The **MONOLITE** valve regulated lead-acid range is specifically designed to meet and exceed the stringent specifications of the Telecommunications industry. Extensive testing and customer field experience since **MONOLITE**'s inception during 1985 ensure ultimate reliability. This "purpose built design" philosophy, coupled with industry leading manufacturing technology, ensures product consistency and reliable performance, in a family of batteries ideally suited to those applications where reliability and quality are a must:

- 12-year plus life
- All **MONOLITE** batteries have passed stringent Telcordia (Bellcore) 10 year accelerated life tests
- Good Energy Density
- Good Low-Rate Performance
- Easy Handling and Installation
- Safe Operation and Ease of Testing
- No Water Addition Needed

FIAMM has a program of continuous improvement investing in manufacturing processes, equipment and technology. FIAMM's Standby Battery manufacture conforms to ISO 9001 quality system and ISO 14001 environmental system. Our continuous investment in battery technology is reflected by means of premium products that are of the highest quality and reliability. **MONOLITE** valve regulated lead acid batteries are the ideal energy source for many different standby applications.

MONOLITE

FAT VRLA range

TECHNICAL FEATURES

- ▶ **Plates and grids:** extra-thick plates with grids cast from high purity lead calcium tin alloy to ensure long and reliable life and low gas emission.
- ▶ **Separators:** micro porous glass mat facilitates recombination and immobilizes the electrolyte.
- ▶ **Internal Connections:** heavy-duty internal straps and through-the-partition cell connections minimize internal resistance for increased energy density.
- ▶ **Terminals:** threaded post terminals with brass inserts provide for high conductivity and maximum torque retention.
- ▶ **Post Seals:** state of the art post seals prevent seepage over a wide temperature range.
- ▶ **Safety Valve:** each cell has its own one-way valve that opens at 5 psi and closes at 3 psi to allow excess gas to escape in case of over charging.
- ▶ **Flame arrestor:** lets excess gas out while preventing any errant spark or flame from entering the battery.
- ▶ **Container and Cover:** made from thick walled flame retardant ABS plastic and designed for unsurpassed mechanical strength, the cases and covers have an LOI greater than 28% and meet the flame retardancy standards of UL 94 V-0.
- ▶ **Handles:** most sizes have either tough rope handles or handles integrated into the battery cover, to aid in handling, installing and removing the batteries.

APPLICABLE STANDARDS

- ▶ Telcordia (Bellcore) SR-4228
- ▶ Telcordia (Bellcore) TR-NWT-001200
- ▶ Telcordia (Bellcore) TR-NWT-000909
- ▶ UL Recognized
- ▶ UL 94 Class V-0
- ▶ UL 1778
- ▶ IEC 60896 Part 21-22
- ▶ Eurobat guide -12 years and longer "long life"
- ▶ British Standard BS 6290 Part 4
- ▶ British Standard BS 6334 method FV 0



PRODUCT FEATURES

- ▶ Safe
- ▶ Versatile
- ▶ Reliable
- ▶ Long life

Standby Batteries



MONOLITE

FAT range



FIAMM FAT VRLA Range (Front Terminals)

Battery Type	Capacity Ah 8 hrs to 1.75 Vpc at 77°F	Nominal Voltage (v)	Dimensions						Weight lbs.
			Length		Width		Height		
			in	mm	in	mm	in	mm	
12 FAT 30	30	12	11.2	280	4.1	105	7.22	183.5	30.86
12 FAT 60	60	12	11.02	280	4.1	105	10.23	260	44
12 FAT 75	75	12	14.17	360	6.46	164	9.29	236	70.99
12 FAT 100	100	12	21.97	558	4.96	126	9.06	230	90.39
12 FAT 125	125	12	21.97	558	4.96	126	10.67	271	110.23
12 FAT 130	130	12	16.55	420.5	6.81	173	10.03	255	115.16
12 FAT 155	155	12	21.97	558	4.96	126	12.64	321	132.28

ELECTRICAL CHARACTERISTICS

- ▶ **Float Voltage at 77°F** : 2.26 Vpc
- ▶ **Float Voltage temperature compensation**: -1.38 mV/°F per cell
- ▶ **Self Discharge** : <2% per month at 77°F

Constant Current discharge rates Amperes to 1.65 Vpc at 77°F (25°C)

Battery Type	Hours										
	1	2	3	4	5	6	7	8	10	12	20
12 FAT 30	20.4	11.5	8.22	6.53	5.46	4.75	4.20	3.77	3.11	2.62	1.65
12 FAT 60	37.60	22.56	16.48	13.29	11.23	9.71	8.55	7.66	6.29	5.37	3.35
12 FAT 75	50.9	28.6	20.5	16.3	13.6	11.9	10.5	9.43	7.77	6.54	4.11
12 FAT 100	65.3	38.0	27.8	22.0	18.4	15.7	14.0	12.7	10.3	8.86	5.59
12 FAT 125	81.6	47.6	34.8	27.5	22.9	19.7	17.5	15.8	12.9	11.1	6.99
12 FAT 130	83.2	48.5	35.4	28.0	23.3	20.0	17.8	16.1	13.1	11.3	7.10
12 FAT 155	101	59.0	43.1	34.1	28.5	24.4	21.6	19.6	15.9	13.7	8.66

Constant Current discharge rates Amperes to 1.75 Vpc at 77°F (25°C)

Battery Type	Hours										
	1	2	3	4	5	6	7	8	10	12	20
12 FAT 30	19.6	11.2	8.12	6.47	5.41	4.71	4.17	3.74	3.08	2.59	1.63
12 FAT 60	36.26	22.04	16.17	13.08	11.02	9.51	8.41	7.57	6.23	5.32	3.33
12 FAT 75	48.9	27.8	20.3	16.2	13.5	11.8	10.4	9.35	7.69	6.48	4.07
12 FAT 100	62.5	37.1	27.1	21.5	18.0	15.4	13.7	12.5	10.2	8.67	5.51
12 FAT 125	78.1	46.4	33.9	26.9	22.5	19.2	17.1	15.6	12.8	10.8	6.89
12 FAT 130	79.3	47.1	34.4	27.3	22.9	19.5	17.4	15.8	13.0	11.0	7.00
12 FAT 155	96.9	57.5	42.0	33.3	27.9	23.8	21.2	19.4	15.8	13.4	8.55



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Standby Batteries



Constant Current discharge rates Amperes to 1.80 Vpc at 77°F (25°C)

Battery Type	Hours										
	1	2	3	4	5	6	7	8	10	12	20
12 FAT 30	19.1	11.0	8.03	6.41	5.38	4.68	4.14	3.71	3.05	2.57	1.61
12 FAT 60	35.33	21.63	15.86	12.88	10.92	9.43	8.34	7.48	6.18	5.27	3.30
12 FAT 75	47.7	27.1	20.1	16.0	13.4	11.7	10.3	9.28	7.62	6.44	4.03
12 FAT 100	60.9	36.4	26.7	21.3	17.8	15.3	13.5	12.3	10.0	8.55	5.45
12 FAT 125	76.2	45.4	33.4	26.6	22.3	19.1	16.9	15.4	12.5	10.7	6.81
12 FAT 130	77.7	46.3	34.0	27.1	22.7	19.4	17.2	15.7	12.7	10.9	6.93
12 FAT 155	94.4	56.4	41.4	33.0	27.7	23.7	21.0	19.1	15.5	13.3	8.45

Constant Power discharge rates Watt per Cell to 1.65 Vpc at 77°F (25°C)

Battery Type	Hours										
	1	2	3	4	5	6	7	8	10	12	20
12 FAT 30	37.4	21.4	15.7	12.5	10.5	9.13	8.09	7.26	5.96	5.03	3.15
12 FAT 60	69.83	42.44	31.11	25.24	21.32	18.54	16.27	14.63	12.05	10.25	6.32
12 FAT 75	93.6	53.4	39.1	31.3	26.2	22.8	20.2	18.1	14.9	12.6	7.88
12 FAT 100	121	71.5	52.6	41.7	34.9	30.0	26.7	24.2	19.7	17.0	10.7
12 FAT 125	152	89.4	65.7	52.2	43.6	37.5	33.3	30.2	24.7	21.2	13.4
12 FAT 130	155	91.2	66.9	53.1	44.4	38.2	33.9	30.7	25.1	21.6	13.6
12 FAT 155	188	111	81.5	64.7	54.1	46.5	41.3	37.5	30.5	26.3	16.6

Constant Power discharge rates Watt per Cell to 1.75 Vpc at 77°F (25°C)

Battery Type	Hours										
	1	2	3	4	5	6	7	8	10	12	20
12 FAT 30	37.0	21.4	15.6	12.5	10.5	9.11	8.07	7.24	5.95	5.02	3.15
12 FAT 60	68.8	42.13	31.00	25.13	21.12	18.33	16.27	14.63	12.05	10.24	6.31
12 FAT 75	92.5	53.1	39.1	31.2	26.2	22.8	20.2	18.1	14.9	12.6	7.87
12 FAT 100	119	71.0	52.0	41.4	34.7	29.7	26.3	24.1	19.7	16.8	10.7
12 FAT 125	148	88.7	65.0	51.7	43.3	37.1	32.9	30.2	24.6	20.9	13.3
12 FAT 130	151	90.5	66.1	52.6	44.1	37.8	33.5	30.7	25.0	21.3	13.5
12 FAT 155	184	110	80.6	64.1	53.7	46.0	40.8	37.4	30.5	26.0	16.5

Constant Power discharge rates Watt per Cell to 1.80 Vpc at 77°F (25°C)

Battery Type	Hours										
	1	2	3	4	5	6	7	8	10	12	20
12 FAT 30	36.6	21.2	15.6	12.5	10.5	9.11	8.06	7.23	5.94	5.02	3.14
12 FAT 60	67.98	41.82	30.80	25.03	21.12	18.44	16.27	14.63	12.05	10.24	6.28
12 FAT 75	91.5	52.5	39.0	31.2	26.2	22.8	20.2	18.1	14.8	12.5	7.86
12 FAT 100	117	70.4	51.8	41.4	34.7	29.8	26.4	24.0	19.5	16.7	10.7
12 FAT 125	147	88.0	64.8	51.8	43.4	37.2	33.0	30.0	24.4	20.9	13.3
12 FAT 130	150	89.8	66.0	52.7	44.2	37.9	33.6	30.5	24.8	21.3	13.5
12 FAT 155	182	109	80.3	64.2	53.9	46.1	40.9	37.2	30.3	25.9	16.5



Standby Batteries





Secure Power Solutions

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