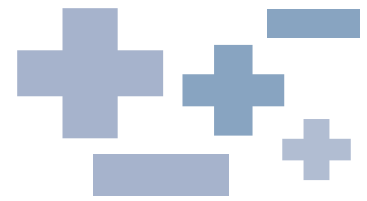


# FIAMM

Industrial Batteries

## MONOLITE FAT series



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

- 12-year + Design life
- All batteries have passed stringent Telcordia (Bellcore) 10 year accelerated life tests
- Superior Energy Density
- Excellent 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 factories are ISO 9001-2000 certified. Our continuous investment in battery technology is reflected by means of premium products that are of the highest quality and reliability. **FAT** valve regulated lead acid batteries are the ideal energy source for many different standby applications.

### 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:** microporous absorbed 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:** releases excess gas 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 retardant 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 Products



## FIAMM FAT range

BATTERY TYPE	NOMINAL VOLTAGE (V)	CAPACITY (Ah) at 77°F 8 hrs to 1.75 Vpc	DIMENSIONS						WEIGHT		Terminal Type
			Length		Width		Height		lbsx	kg	
			in	mm	in	mm	in	mm			
12 FAT 30	12	30	11.02	280	4.1	105	7.22	183.5	30.86	14	Female M6
12 FAT 60	12	60	11.02	280	4.1	105	10.23	260	44	20	Female M6
12 FAT 75	12	75	14.17	360	6.46	164	9.29	236	70.99	32.2	Male M8
12 FAT 100	12	100	21.97	558	4.96	126	9.06	230	90.39	41	Male M8
12 FAT 125	12	125	21.97	558	4.96	126	10.67	271	110.23	50	Male M8
12 FAT 130	12	130	16.55	420.5	6.81	173	10.03	255	115.16	52.2	Male M8
12 FAT 145	12	145	16.55	420.5	6.81	173	10.03	255	115.16	52.2	Female M6
12 FAT 155	12	155	21.97	558	4.96	126	12.64	321	132.28	60	Male M8

### Torque Settings

- + Female M6: 44-62 inlbs (5-7 Nm)
- + Male M8: 65-70 (7.3-8 Nm)

### Front Terminal Adapter

- + Part Number: P1039 - L
- + Terminal Type: Male M6

### Electrical Characteristics

- + FLOAT VOLTAGE CHARGE AT 77°F: 2.26 Vpc
- + TEMPERATURE COMPENSATION: -1.38 mV/°F
- + SELF-DISCHARGE AT 77°F: < 2% / month

BATTERY TYPE	Constant Current Discharge Rates Amperes to 1.65 Vpc at 77°F (25°C)										
	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 145	98.0	57.88	41.54	32.68	27.23	23.36	20.08	18.47	15.34	12.74	8.53
12 FAT 155	101	59.0	43.1	34.1	28.5	24.4	21.6	19.6	15.9	13.7	8.66

BATTERY TYPE	Constant Current Discharge Rates Amperes to 1.75 Vpc at 77°F (25°C)										
	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 145	94.0	56.46	40.7	32.13	26.7	22.95	19.68	18.13	15.06	12.44	8.45
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



BATTERY TYPE	Constant Current Discharge Rates Amperes to 1.80 Vpc at 77°F (25°C)										
	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 145	91.5	55.25	39.98	31.7	26.5	22.9	19.48	18.0	14.95	12.34	8.40
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

BATTERY TYPE	Constant Power Discharge Watt per cell to 1.65 Vpc at 77°F (25°C)										
	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 145	183.3	109.4	78.88	62.25	51.99	44.71	38.34	35.40	29.43	24.42	16.04
12 FAT 155	188	111	81.5	64.7	54.1	46.5	41.3	37.5	30.5	26.3	16.6

BATTERY TYPE	Constant Power Discharge Watt per cell to 1.75 Vpc at 77°F (25°C)										
	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	29.8	26.4	24.1	19.7	16.8	10.7
12 FAT 125	148	88.7	65.0	51.8	43.4	37.2	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 145	178.5	108	78.14	61.82	51.6	44.65	37.98	35.12	29.18	24.12	16.01
12 FAT 155	184	110	80.6	64.2	53.9	46.1	40.9	37.4	30.5	26.0	16.5

BATTERY TYPE	Constant Power Discharge Watt per cell to 1.80 Vpc at 77°F (25°C)										
	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	29.7	26.3	24.0	19.5	16.7	10.7
12 FAT 125	147	88.0	64.8	51.8	43.3	37.1	33.0	30.0	24.4	20.9	13.3
12 FAT 130	150	89.8	66.0	52.8	44.2	37.9	33.6	30.5	24.8	21.3	13.5
12 FAT 145	176	106.9	77.64	61.66	51.42	44.65	37.88	35.08	29.1	24.06	16.0
12 FAT 155	182	109	80.3	64.1	53.7	46.0	40.8	37.2	30.3	25.9	16.5