



an EnerSys® company

AlphaCell® FTX Series

Pure Lead High Temperature Battery



- Optimized for broadband applications
- Space-saving front terminal design for ease of maintenance
- 99.9% pure lead increases temperature and corrosion resistance
- Thin plates deliver large surface area, high power density and low resistance
- Fast charging with no limit
- 15+ year design life at 20°C (68°F)
- Extra-long life at high temp operation 40°C (104°F)

The AlphaCell® FTX Series is a front terminal 12VDC VRLA AGM battery offering a Thin Plate Pure Lead (TPPL) technology with an exceptional float service life at elevated temperatures.

The AlphaCell FTX battery is an innovative solution specially designed for light duty cycling applications that require long float life in high-temperature environments. The AlphaCell FTX battery is built with TPPL

technology minimizing corrosion and maximizing life expectancy with higher power density and tolerant to higher operating temperatures compared to traditional VRLA AGM batteries. These benefits lead to cost savings, due to reduced battery replacement, cooling and maintenance.

Our advanced robotic manufacturing process ensures the highest quality and accuracy. In addition, this energy storage offering requires no periodic watering and at the end of life, batteries are 99% recyclable.

AlphaCell® FTX Series Specifications

Model:	100FTX	155FTX	170FTX	190FTX	210FTX
Terminal:	Threaded Insert: Female M8 × 1.25 FT Adapter: Male M8 × 1.25	Threaded Insert: Female M8 × 1.25 FT Adapter: Male M6 × 1.25	Threaded Insert: Female M8 × 1.25 FT Adapter: Male M6 × 1.25	Threaded Insert: Female M8 × 1.25 FT Adapter: Male M6 × 1.25	Threaded Insert: Female M8 × 1.25 FT Adapter: Male M6 × 1.25
Terminal Torque:	8.0Nm (71in-lbs)	8.0Nm (71in-lbs)	8.0Nm (71in-lbs)	8.0Nm (71in-lbs)	8.0Nm (71in-lbs)
1hr Capacity to 1.70VPC @ 20/25°C (68/77°F):	77 / 81Ah	114 / 119Ah	126 / 131Ah	140 / 146Ah	150 / 156Ah
3hr Capacity to 1.75VPC @ 20/25°C (68/77°F):	89 / 92Ah	131 / 135Ah	156 / 160Ah	167 / 172Ah	184 / 189Ah
8hr Capacity to 1.75VPC @ 20/25°C (68/77°F):	89 / 100Ah	148 / 150Ah	171 / 174Ah	185 / 188Ah	207 / 210Ah
10hr Capacity to 1.80VPC @ 20/25°C (68/77°F):	99 / 100Ah	151 / 154Ah	172 / 174Ah	187 / 190Ah	209 / 212Ah
Float Voltage @ 20/25°C (68/77°F):	2.28 / 2.27VPC	2.28 / 2.27VPC	2.28 / 2.27VPC	2.28 / 2.27VPC	2.28 / 2.27VPC
Impedance (1Khz):	3.9mΩ @ 25°C (77°F)	2.4mΩ @ 25°C (77°F)	2.6mΩ @ 25°C (77°F)	2.3mΩ @ 25°C (77°F)	2.6mΩ @ 25°C (77°F)
Conductance:	1298S	2185S	1985S	2366S	2102S
Short Circuit Current:	3500A	5000A	6000A	6000A	6000A
Operation Temperature Range:	-40°C to 65°C	-40°C to 65°C	-40°C to 65°C	-40°C to 65°C	-40°C to 65°C
Nominal Voltage:	12V	12V	12V	12V	12V
Dimensions* H × L × W (in):	11.42 × 14.59 × 4.19	11.14 × 20.43 × 4.87	12.72 × 20.42 × 4.87	12.72 × 20.42 × 4.87	13.02 × 22.01 × 4.91
Weight (lb):	72	117	121	132	145

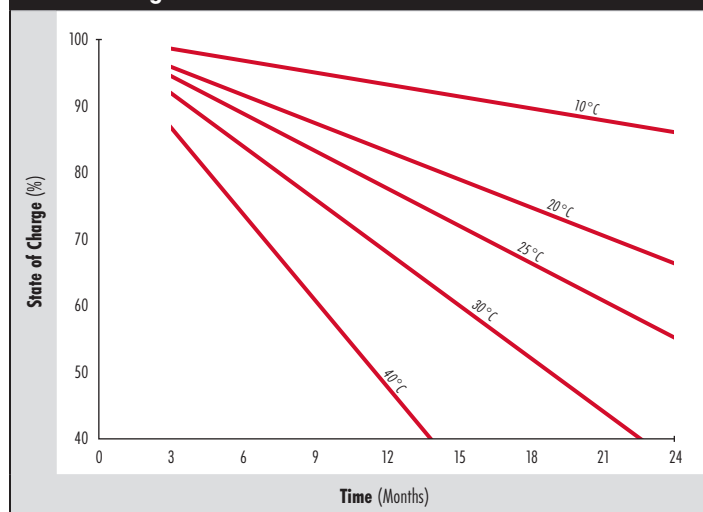
Constant Current Discharge Rate in Amps at 77°F (25°C) to 1.75VPC

Discharge Time	2min	5min	10min	15min	20min	30min	45min	1hr	2hr	3hr	4hr	5hr	8hr	10hr	12hr	20hr	24hr
100FTX:	438.6	355.8	263.4	210.4	176	133.5	98.8	78.7	43.9	30.6	23.6	19.2	12.4	10.1	8.6	5.4	5.4
155FTX:	706.5	566.7	411.6	324.4	268.7	201.2	147.1	116.4	64.3	44.9	34.7	28.4	18.8	15.4	13.2	8.6	8.6
170FTX:	618	490.7	372.6	305.4	261.1	204.8	156.8	128	75	53.4	41.5	33.9	21.8	17.5	14.6	8.7	8.7
190FTX:	637.6	555	431.2	353.5	300.8	233.3	176.1	142.1	81.2	57.2	44.3	36.2	23.5	19.1	16.1	10	10
210FTX:	673.1	563.5	435.9	359.1	307.4	241.2	184.5	150.4	88.1	62.9	49.1	40.3	26.3	21.3	18	11	11

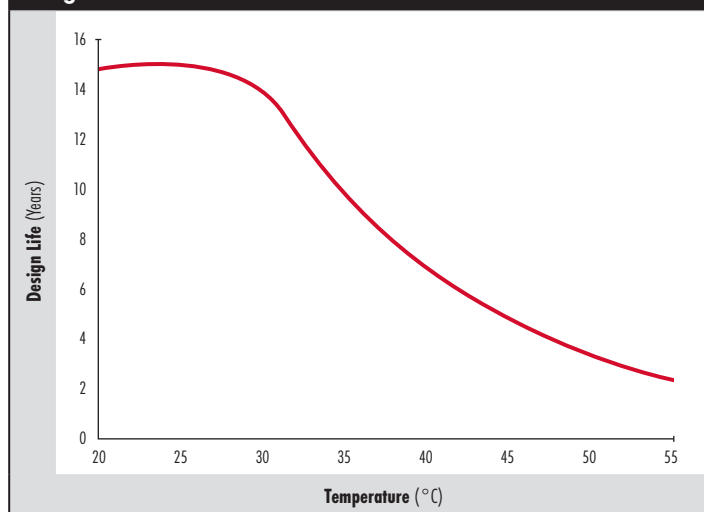
Constant Current Discharge Rate in Amps at 77°F (25°C) to 1.80VPC

Discharge Time	2min	5min	10min	15min	20min	30min	45min	1hr	2hr	3hr	4hr	5hr	8hr	10hr	12hr	20hr	24hr
100FTX:	366.3	315.3	241.9	196.6	166.2	127.8	95.6	76.6	43.2	30.3	23.4	19	12.3	10	8.4	5.3	5.3
155FTX:	607.8	507.4	378.9	303.2	253.7	192.4	142.3	113.4	63.5	44.6	34.6	28.3	18.7	15.3	13.1	8.5	8.5
170FTX:	505.9	428.8	338.7	283.2	245	195.2	151.4	124.5	73.9	52.9	41.2	33.7	21.6	17.4	14.5	8.6	8.6
190FTX:	536.7	488.9	391.8	326.4	280.8	220.9	168.8	137.3	79.7	56.5	43.9	36	23.4	19	16	9.9	9.9
210FTX:	594	497.7	391	326.3	282.3	225	174.8	144.1	86.4	62.3	48.8	40.1	26.2	21.2	17.8	10.7	10.7

State of Charge vs. Time



Design Life



*Length dimensions are for the battery base to ensure tray fit.



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