



VRLA Rechargeable Battery

FTH100-12FR Pure Lead Battery for High Temperature



FEATURES

- Excellent high temperature performance
- Special sealing compound to prevent any leaks
- High compression and puncture resistance separator
- Reinforced case resists high temperature condition
- Special alloy inhibits corrosion under the highest temperature extremes
- Electrolyte additive to prevent internal short circuit at high temperature
- Advanced manufacturing techniques to ensure quality products
- Broad operating temperature from -40°C to 65°C
- Anti-muddy agent to provide the longest life 10 years at 35°C

APPLICATION

- Storage energy system
- Power station and UPS system
- Solar
- Telecom
- IDC(Internet Data Center)



SPECIFICATIONS

Nominal Voltage	12V	
Nominal Capacity	10 Hour Rate (10.0A, 10.8V)	100 Ah @ 35°C
	10 Hour Rate (9.50A, 10.8V)	95 Ah @ 25°C
Approx. Weight	35.4kg(78.04lbs.)	
Terminals	I2 (M6 Female Thread)	
Max. Discharge Current	800 A (5 sec.)	
Max. Charge Current	30 A	
Operating Temperature Range	-40°C~65°C(-40°F~149°F)	
Self Discharge	< 5% per month (35°C)	
Internal Resistance	≤ 4.2mΩ (Fully Charged)	
Float Voltage	2.24 ± 0.01 VPC. Recommended 2.24 VPC @ 35°C	

CONTAINER MATERIAL

- Flame Retardant ABS(UL94 V-0)
- Model Name: FTH100-12FR

Certificate as below:



Compliance of the standards as below:

- IEC60896-21/22
- BS 6290/4
- GB/T 19638.2
- Eurobat guide

OUTER DIMENSIONS mm(inch)

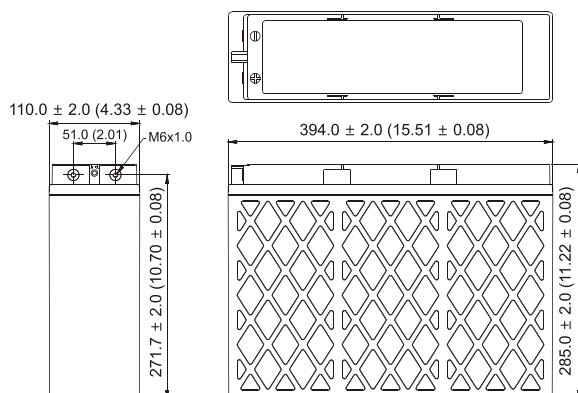
Length (L)

Width (W)

Container Height (H)

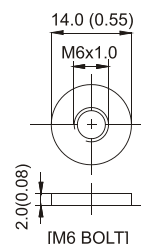
Total Height (TH)

394 $\pm$ 2.0(15.51 $\pm$ 0.08) 110 $\pm$ 2.0(4.33 $\pm$ 0.08) 285 $\pm$ 2.0(11.22 $\pm$ 0.08) 285 $\pm$ 2.0(11.22 $\pm$ 0.08)



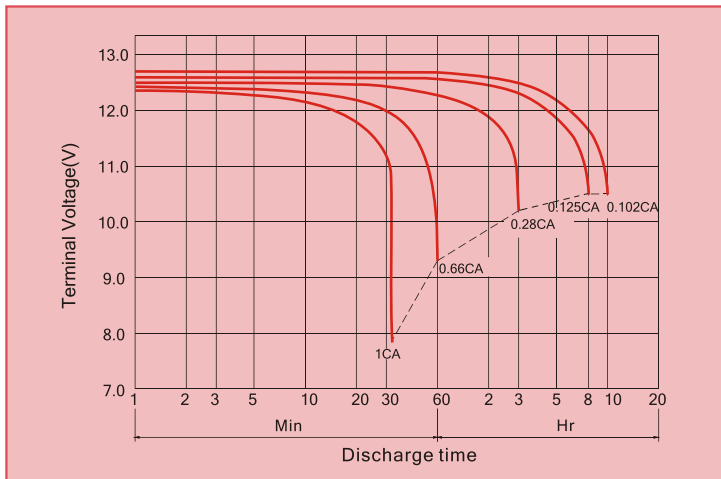
TERMINAL TYPE

Terminal I2

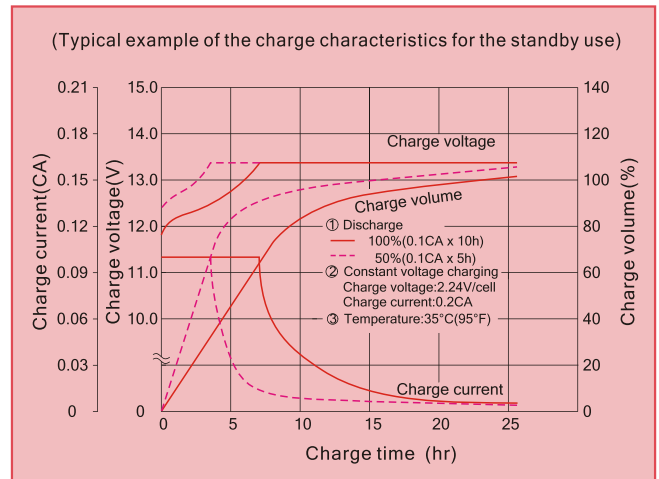


Terminal Hardware Initial Torque: 5.5 Nm $\pm$ 5%

FTH100-12FR discharge characteristics (35°C/95°F)



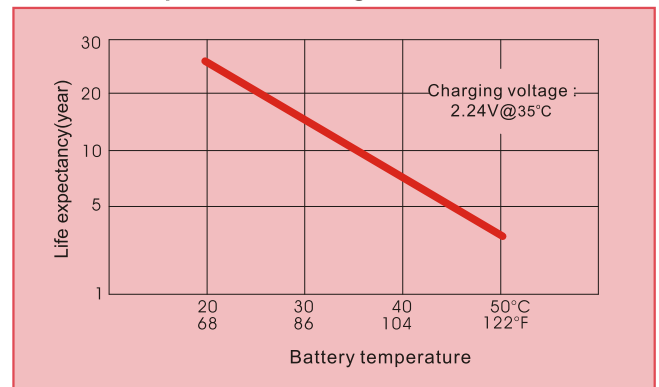
Battery Charging Characteristics



Charging Procedure

Application	Charging method	Charging Voltage at 35°C (V/cell)	Temperature compensation coefficient of charging voltage (mV/°C/cell)	Max. charging current (CA)	Charging time 0.2CA, 35°C (h)	
					100% discharge	50% discharge
For standby power Source	Constant voltage & Constant current charging (with current restriction)	2.23~2.25	-3	0.3	24	20
For cycle service		2.35~2.40	-4	0.3	20	16

Effect Of Temperature On Long Term Float Life



Constant power discharge characteristics at 35 °C/95 °F

Unit: W

Discharge Time	15 Min	30 Min	45 Min	1 Hr	2 Hr	3 Hr	4 Hr	5 Hr	8 Hr	10 Hr	20 Hr
1.90V	1629	1006	793	647	388.2	270.7	214.6	198.2	128.4	106.6	56.0
1.85V	1792	1106	866	720	427.4	295.8	234.6	215.6	139.7	116.0	60.9
1.80V	1903	1175	915	761	444.5	306.8	242.6	223.2	144.6	120.0	63.0
1.75V	1976	1220	946	779	452.8	310.8	246.7	225.3	146.0	121.2	63.6
1.70V	2019	1246	964	792	457.2	313.8	248.8	225.3	146.0	121.2	63.6
1.65V	2049	1265	978	802	461.3	316.9	250.7	225.3	146.0	121.2	63.6
1.60V	2069	1277	986	807	463.1	317.8	251.3	225.6	146.2	121.3	63.7

Constant current discharge characteristics at 35 °C/95 °F

Unit: A

Discharge Time	15 Min	30 Min	45 Min	1 Hr	2 Hr	3 Hr	4 Hr	5 Hr	8 Hr	10 Hr	20 Hr
1.90V	137.5	83.9	66.0	54.6	32.58	22.66	17.87	16.52	10.70	8.88	4.66
1.85V	152.7	93.1	72.7	60.7	35.89	24.76	19.55	17.95	11.63	9.66	5.07
1.80V	163.4	99.6	77.1	64.1	37.30	25.68	20.22	18.60	12.05	10.00	5.25
1.75V	169.4	103.3	79.8	65.7	38.02	26.01	20.56	18.78	12.17	10.10	5.30
1.70V	173.3	105.7	81.3	66.7	38.37	26.26	20.72	18.78	12.17	10.10	5.30
1.65V	175.8	107.2	82.5	67.6	38.73	26.52	20.90	18.78	12.17	10.10	5.30
1.60V	177.5	108.2	83.1	67.7	38.89	26.60	20.93	18.80	12.18	10.11	5.31

All data and artworks shall be changed without prior notice, BB reserves the right to explain and update the information contained herein.
For operation, please refer to the instruction from technical manual.

SC(for Sader) A/1 REV. Jan. 2021

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