



VRLA Rechargeable Battery



# FTH100-12

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 85°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(35°C)	10 Hour Rate (10.0A, 10.5V)	100 Ah
Approx. Weight	37kg(81.57lbs.)	
Terminals	I2 (M6 Female Thread)	
Max. Discharge Current	800 A (5 sec.)	
Max. Charge Current	30 A	
Operating Temperature Range	-40°C~85°C(-40°F~185°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

- Standard: ABS( UL 94-HB)  
Model Name: FTH100-12
- Optional: Flame Retardant (UL 94-V1)  
Model Name: FTH100-12FR

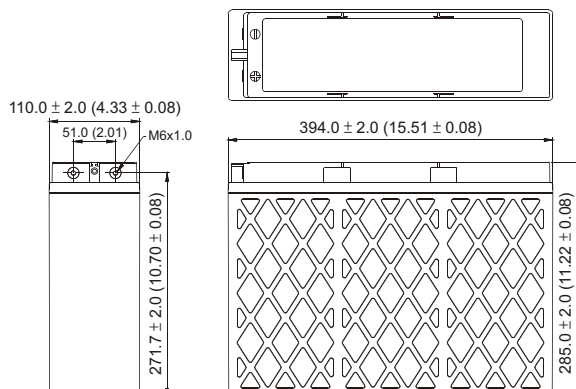
**WSF** **WSF** **WSF**  
ISO9001 ISO14001 OHSMS



- IEC60896-21/22
- BS6290/4
- GB/T 19638.2
- Eurobat guide

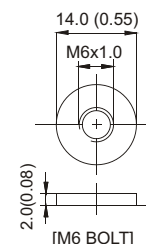
## OUTER DIMENSIONS mm(inch)

Length (L)	Width (W)	Container Height (H)	Total Height (TH)
394±2.0(15.51±0.08)	110±2.0(4.33±0.08)	285±2.0(11.22±0.08)	285±2.0(11.22±0.08)



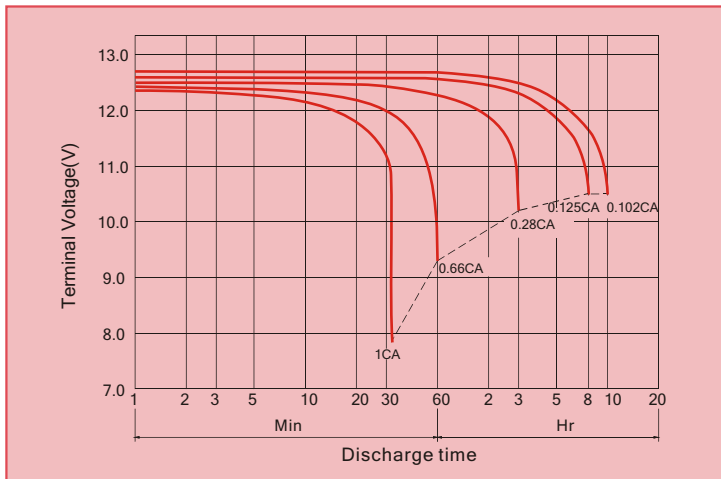
## TERMINAL TYPE

Terminal I2

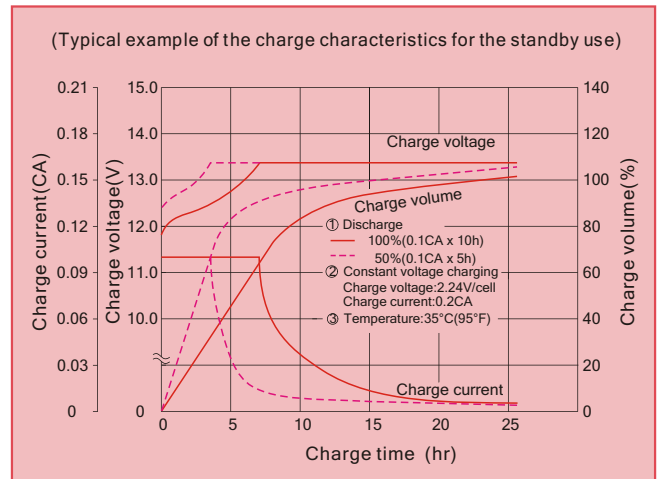


Terminal Hardware Initial Torque: 5.5 Nm ± 5%

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



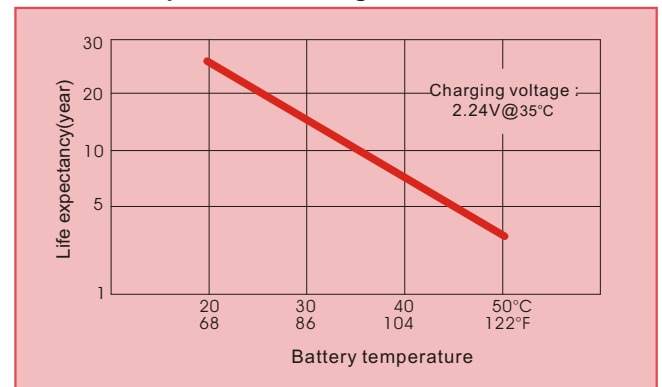
### Battery Charging Characteristics



### 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

### Effect Of Temperature On Long Term Float Life



### Constant power discharge characteristics at 35 °C/95 °F Unit: W

F.V. (V/cell) \ 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	1390	1143	835	664.0	404.4	300.8	238.4	199.2	135.4	110.4	58.62
1.85V	1639	1257	912	738.3	445.2	328.7	260.7	217.0	146.5	120.1	63.77
1.80V	1852	1335	963	780.0	463.0	340.9	269.6	223.8	151.3	124.3	66.01
1.75V	2034	1386	996	798.5	471.7	345.3	274.1	228.2	153.8	125.5	67.12
1.70V	2177	1416	1015	811.8	476.2	348.7	276.4	229.3	153.8	125.5	67.12
1.65V	2273	1437	1029	822.7	480.5	352.1	278.6	230.5	153.8	125.5	67.12
1.60V	2295	1451	1038	827.7	482.4	353.1	279.2	230.9	155.7	126.5	67.40

### Constant current discharge characteristics at 35 °C/95 °F Unit: A

F.V. (V/cell) \ 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	117.3	95.3	69.5	56.50	34.12	25.18	19.86	16.59	11.28	9.20	4.88
1.85V	138.7	105.8	76.5	62.84	37.58	27.51	21.72	18.09	12.20	10.00	5.31
1.80V	159.0	113.2	81.2	66.39	39.06	28.53	22.47	18.65	12.61	10.36	5.50
1.75V	177.7	117.4	84.0	67.97	39.81	28.90	22.84	19.02	12.82	10.46	5.59
1.70V	192.2	120.1	85.6	69.08	40.18	29.18	23.02	19.12	12.82	10.46	5.59
1.65V	201.0	121.8	86.8	70.02	40.56	29.47	23.22	19.21	12.82	10.46	5.59
1.60V	203.4	123.0	87.5	70.44	40.72	29.55	23.26	19.24	12.97	10.54	5.62

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

Trial A/1 REV. Aug. 2015

**USA:**  
B&B BATTERY(USA) INC.  
6415 RANDOLPH ST.COMMERCE, CA,90040 U.S.A.  
TEL:1-323-278-1900.1-800-278-8599  
FAX:1-323-278-1268  
E-Mail:sales@bb-battery.com

**CHINA FACTORY:**  
B.B. BATTERY CO., LTD.  
CHENG DONG TRIAL AREA,HUANG GANG,  
RAOPING, GUANG DONG,CHINA,515700  
TEL:86-768-7601001-2  
FAX:86-768-7601469  
E-Mail:maggy@bb-battery.com

**EUROPE:**  
B&B BATTERY(EUROPE) B.V.  
SUITE 8, HAAKSBERGWEG 33, 1101  
BP AMSTERDAM, THE NETHERLANDS  
TEL: 31-30-320-0190  
MOBILE: 852-9128-2711  
E-Mail: dliu@bb-battery.com

**HONG KONG:**  
B&B BATTERY(Hong Kong) Co.  
TEL:852-2311-4918  
FAX:852-2739-1182  
E-Mail:bbhk@hkstar.com

**JAPAN:**  
B&B BATTERY(JAPAN) CO., LTD.  
1375-11 NARAHARA-MACHI,HACHIOJI,  
TOKYO 193-0803,JAPAN.  
TEL:81-426-25-6375  
FAX:81-426-25-6375  
E-Mail:miyata@bb-battery.com

**TAIWAN:**  
B.B. BATTERY(TAIWAN) CO., LTD.  
TEL:886-6-502-5150  
FAX:886-6-589-8087  
E-Mail:kevinlin@bb-battery.com