



## VRLA Rechargeable Battery

# FTB105-12 (FTB105-12FR)

### FEATURES

- Absorbent Glass Mat technology for efficient gas recombination
- 10-12 years design life in float applications @ 25°C
- Front accessible terminal for ease of assembly
- Carry handles for ease of installation
- Strengthened rib design to maintain structural integrity
- Flame-arrestor is installed to ensure safety
- Battery design allows for 48VDC configuration in a standard 19" rack
- One-way self-resealing safety valve for long life guarantee

### APPLICATION

- UPS
- Telecom
- Broadband
- Railroad Signal
- Electric Utility
- Central Office



### SPECIFICATIONS

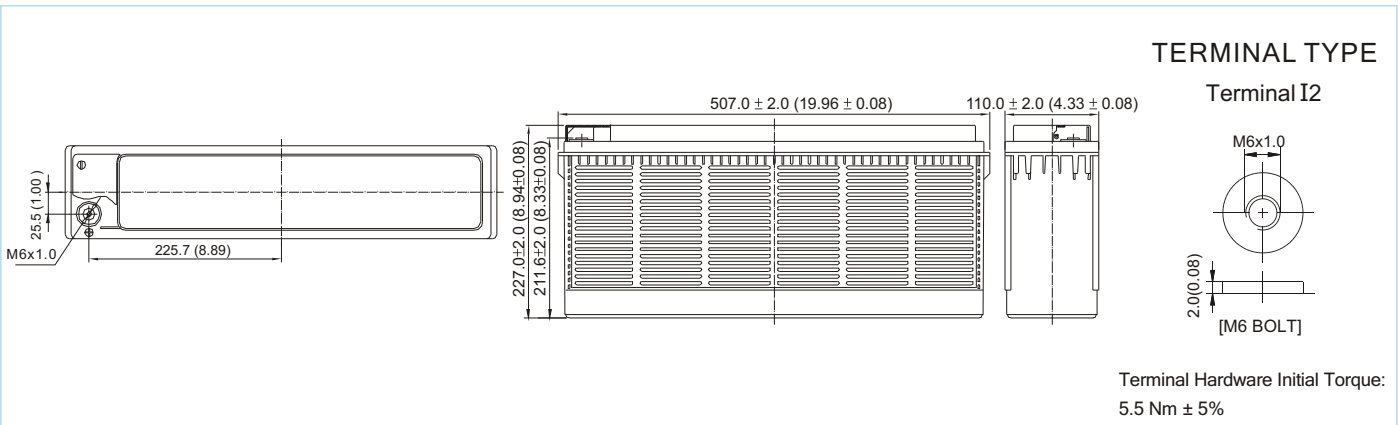
Nominal Voltage	12V	
Nominal Capacity(25°C)	10 Hour Rate (10.70A, 10.5V)	107.0 Ah
	8 Hour Rate (13.1A, 10.5V)	105.0 Ah
	1 Hour Rate (69.3A, 10.5V)	69.3 Ah
Approx. Weight	35.0Kg(77.18lbs.)	
Terminals	I2 (M6 Female Thread)	
Max. Discharge Current	800 A (5 sec.)	
Max. Charge Current	26.3 A	
Operating Temperature Range	Charge	0°C~40°C(32°F~104°F)
	Discharge	-20°C~50°C(-4°F~122°F)
	Storage	-20°C~40°C(-4°F~104°F)
Self Discharge	< 3% per month (25°C)	
Internal Resistance	≤ 3.5mΩ (Fully Charged )	
Float Voltage	2.25 to 2.30 VPC. Recommended 2.275 VPC @ 20°C	
Safety Valve	Opening pressure 10~35 kPa	

### CONTAINER MATERIAL

- FTB105-12:  
ABS: UL 94-HB (Dark gray color)
- FTB105-12FR:  
ABS: UL 94-V0 (Light gray color)

 ISO 9001	 ISO14001
 MH19884 UL	 C4M20310-2474-E-16 CE
● IEC60896	● BS6290/4
● GB/T 19638	● Eurobat guide

OUTER DIMENSIONS	mm(inch)	Length (L)	Width (W)	Container Height (H)	Total Height (TH)
		507±2.0(19.96±0.08)	110±2.0(4.33±0.08)	227±2.0(8.94±0.08)	227±2.0(8.94±0.08)



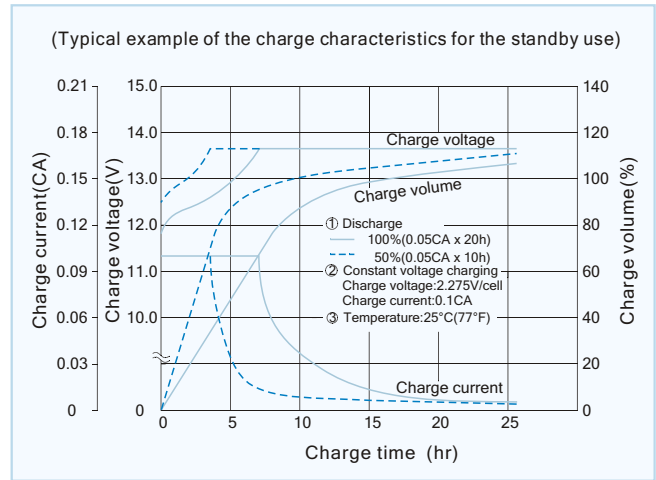
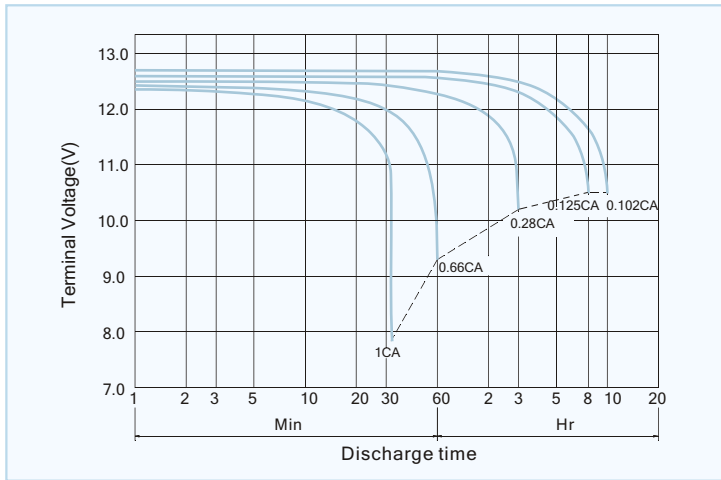
### TERMINAL TYPE

Terminal I2

Terminal Hardware Initial Torque:  
5.5 Nm ± 5%

**FTB105-12 (FTB105-12FR) discharge characteristics (25°C /77°F)**

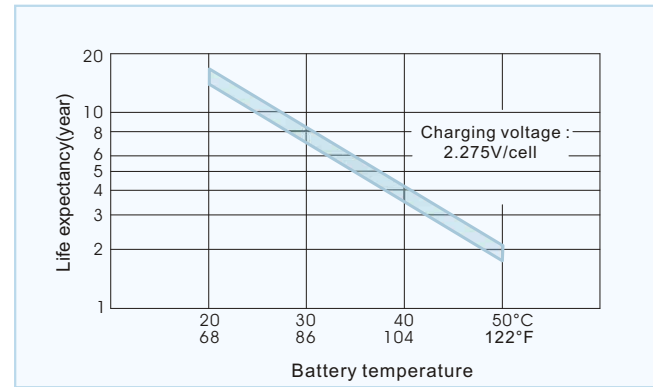
**Battery Charging Characteristics**



**Charging Procedure**

Application	Charging method	Charging Voltage at 25°C (V/cell)	Temperature compensation coefficient of charging voltage (mV/°C /cell)	Max. charging current (CA)	Charging time 0.1CA, 25°C (h)		Temp (°C)
					100% discharge	50% discharge	
For standby power Source	Constant voltage & Constant current charging (with current restriction)	2.25~2.30	-3	0.2	24	20	0~40 (32~104°F)
For cycle service		2.40~2.50	-4	0.2	16	10	

**Effect Of Temperature On Long Term Float Life**



**Constant power discharge characteristics at 25 °C/77 °F Unit: W**

F.V. (V/cell) \ Discharge Time	30 Min	45 Min	1 Hr	2 Hr	3 Hr	4 Hr	5 Hr	8 Hr	10 Hr	20 Hr
1.90V	1082	789	651.3	391.3	287.6	230.1	193.9	132.62	108.47	58.14
1.85V	1287	855	755.9	455.8	336.5	266.9	222.2	149.96	122.90	60.02
1.80V	1367	986	798.5	474.0	349.0	276.0	229.1	154.93	127.26	67.58
1.75V	1419	1019	817.5	482.9	353.5	280.7	233.6	157.50	128.52	68.73
1.70V	1450	1039	831.1	487.5	357.0	283.0	234.8	157.50	128.52	68.73
1.65V	1471	1053	842.3	492.0	360.4	285.2	236.0	157.50	128.52	68.73

**Constant current discharge characteristics at 25 °C/77 °F Unit: A**

F.V. (V/cell) \ Discharge Time	30 Min	45 Min	1 Hr	2 Hr	3 Hr	4 Hr	5 Hr	8 Hr	10 Hr	20 Hr
1.90V	90.2	65.8	54.28	32.61	23.97	19.18	16.16	11.05	9.04	4.85
1.85V	108.3	71.2	64.33	38.47	28.16	22.24	18.52	12.50	10.24	5.00
1.80V	115.9	83.2	67.97	39.99	29.21	23.01	19.09	12.92	10.61	5.63
1.75V	120.2	85.9	69.58	40.76	29.59	23.38	19.48	13.13	10.71	5.73
1.70V	122.9	87.6	70.73	41.14	29.87	23.57	19.57	13.13	10.71	5.73
1.65V	124.7	88.8	71.69	41.52	30.16	23.77	19.66	13.13	10.71	5.73

All data shall be changed without prior notice, BB reserves the right to explain and update the information contained hereinto.

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