VRLA Rechargeable Battery

EB80-12 (EB80-12FR)

FEATURES

- Maintenance free(no water topping-up required)
- No free acid(Non-spillable battery)
- Can be used in any orientation(excluding used inverted)
- The battery is designed for high power & high cyclic usage
- Its design life is approx.300 cycles at 100% discharge in cycle service at 77°F/25°C

APPLICATION

- UPS
- Electric Motorcycle
- Wheelchairs
- Lawn Mowers
- Golf-Carts

SPECIFICATIONS

Nominal Voltage	12V	
Nominal Capacity	20 Hour Rate (4.0 A, 10.5V)	80 Ah
	2 Hour Rate (32 A, 9.6V)	64 Ah
Approx. Weight	26Kg(57.3lbs.)	
Terminals	I2 (M6 Female thread)	
Max. Discharge Current	800 A (5 sec.)	
Max. Charge Current	24.0 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	≦5mΩ (Fully Charged)	

CONTAINER MATERIAL

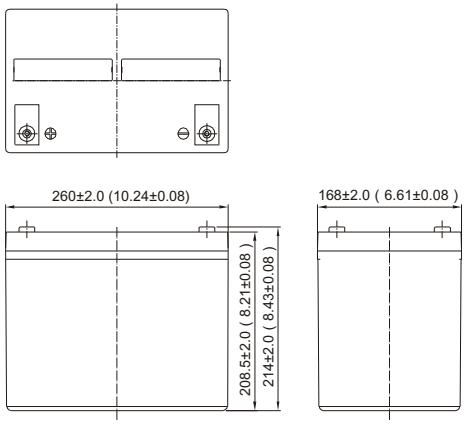
- EB80-12:
  ABS: UL 94-HB (Dark gray color)
- EB80-12FR:
  ABS: UL 94-V0 (Light gray color)

ISO 9001	ISO14001
MH19884 UL	C4M20310-2474-E-16 CE

- IEC60896
- JIS C 8704
- GB/T 19638.2

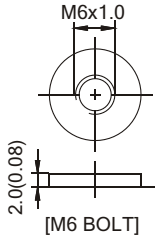
OUTER DIMENSIONS mm(inch)

Length (L)	Width (W)	Container Height (H)	Total Height (TH)
260±2.0 (10.24±0.08)	168±2.0 (6.61±0.08)	208.5±2.0 (8.21±0.08)	214±2.0 (8.43±0.08)



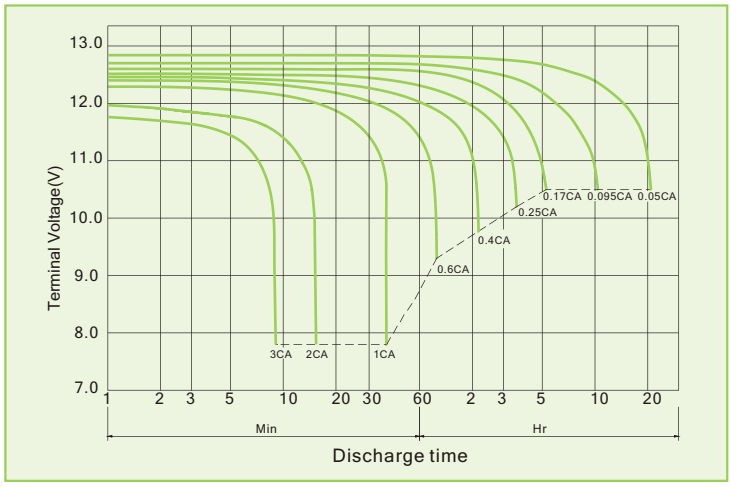
TERMINAL TYPE

- Terminal I2

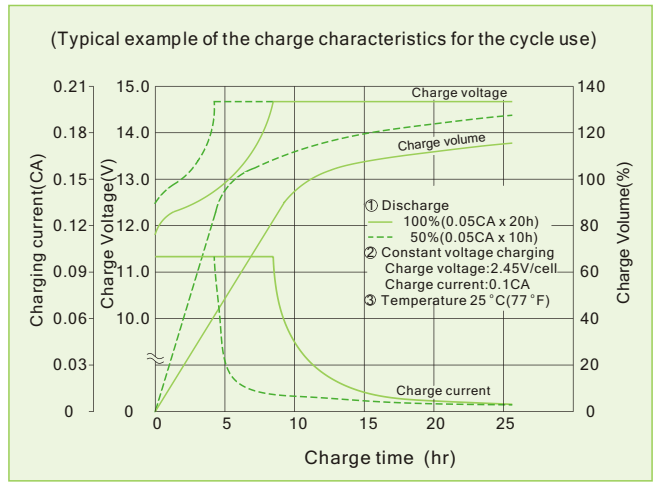


Terminal Hardware Initial Torque:
I2(5.5Nm±5%)

EB80-12 (EB80-12FR) discharge characteristics (25°C/77°F)



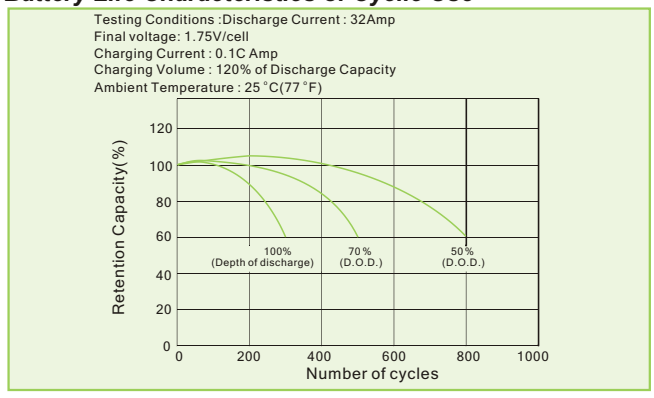
Battery Charging Characteristics



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	0.3	24	20	0~40 (32~ 104°F)
For cycle service		2.40~2.50	-4	0.3	16	10	

Battery Life Characteristics of Cyclic Use



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

F.V. (V/cell) \ Discharge Time	10 Min	15 Min	30 Min	40 Min	1 Hr	2 Hr	3 Hr	5 Hr	10 Hr	20 Hr
1.80V	2154.7	1744.8	1097.4	870.1	664.0	364.8	280.0	177.4	89.8	46.98
1.75V	2334.4	1826.7	1139.5	901.6	683.2	374.4	285.3	179.7	91.2	48.00
1.70V	2418.7	1881.9	1164.5	919.7	695.2	378.2	288.0	181.1	91.7	48.22
1.65V	2476.5	1925.9	1181.4	932.5	704.8	382.1	290.7	182.4	91.9	48.34
1.60V	2525.6	1963.8	1193.4	941.9	712.0	384.0	292.0	182.4	91.9	48.37
1.50V	2576.3	2003.0	1205.4	951.4	719.5	385.9	293.8	182.4	91.9	48.37

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

F.V. (V/cell) \ Discharge Time	10 Min	15 Min	30 Min	40 Min	1 Hr	2 Hr	3 Hr	5 Hr	10 Hr	20 Hr
1.80V	189.6	151.7	93.0	73.4	55.8	30.4	23.4	14.8	7.5	3.92
1.75V	205.4	158.9	96.6	76.2	57.4	31.2	23.8	15.0	7.6	4.00
1.70V	213.0	163.7	98.7	77.6	57.6	31.5	24.0	15.1	7.6	4.02
1.65V	218.1	167.5	100.2	78.7	59.2	31.8	24.2	15.2	7.7	4.03
1.60V	222.4	170.7	101.1	79.5	59.8	32.0	24.3	15.2	7.7	4.03
1.50V	226.7	174.2	102.1	80.3	60.5	32.2	24.5	15.2	7.7	4.03

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

Trial A/0 REV. Jan. 2010

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