



## VRLA Rechargeable Battery

# EB14-12N

### FEATURES

- Absorbent Glass Mat technology for efficient gas recombination
- 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
- Lawn Mowers
- Wheelchairs
- E-bike
- Golf-Carts
- Electrical Scooter



### SPECIFICATIONS

Nominal Voltage	12V	
Nominal Capacity	20 Hour Rate (0.7A, 10.5V)	14.0 Ah
	2 Hour Rate (6.0A, 10.5V)	12.0 Ah
Approx. Weight	4590g(10.12lbs.)	
Terminals	I1, T2 is optional	
Max. Discharge Current	210 A (5 sec.)	
Max. Charge Current	4.2 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 (20°C)	
Internal Resistance	≤10mΩ (Fully Charged )	

### CONTAINER MATERIAL

- Standard: ABS( UL 94-HB)
- Model: EB14-12N

<b>WSF</b> ISO9001	<b>WSF</b> ISO14001	<b>WSF</b> OHSMS
<b>UL</b> MH19884	<b>CE</b> C4M20310-2474-E-16	
● IEC 61056-1	● JIS C 8702-1	● GB/T 19639.1

OUTER DIMENSIONS mm(inch)	Length (L)	Width (W)	Container Height (H)	Total Height (TH)
	151±1.5(5.94±0.06)	98±1.5(3.86±0.06)	96.5±1.5(3.80±0.06)	I1: 98.5±1.5(3.88±0.06) T2: 102±1.5(4.02±0.06)

### TERMINAL TYPE

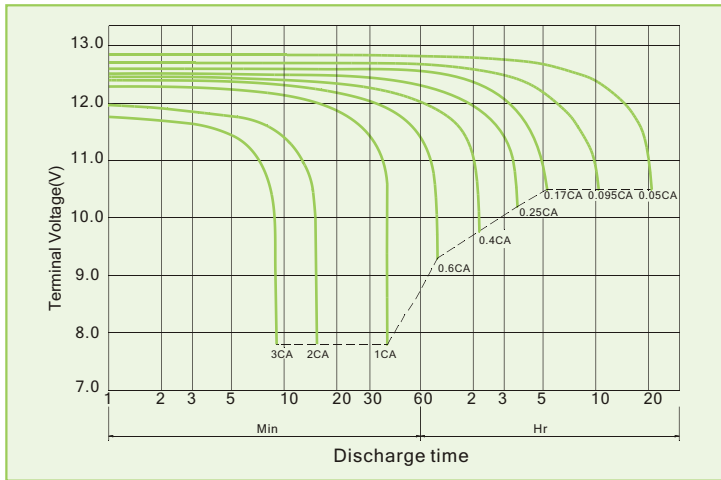
● Terminal I1

[M5 BOLT & NUT]

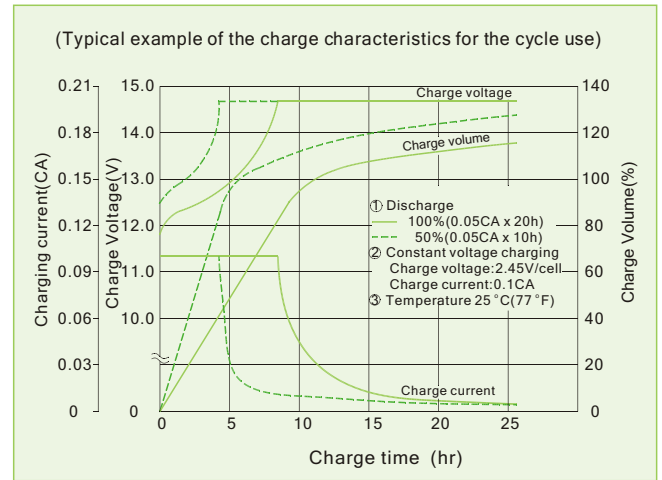
● Terminal T2

Terminal Hardware Initial Torque:I1(4.0Nm±5%)

### EB14-12 N discharge characteristics (25°C /77°F)



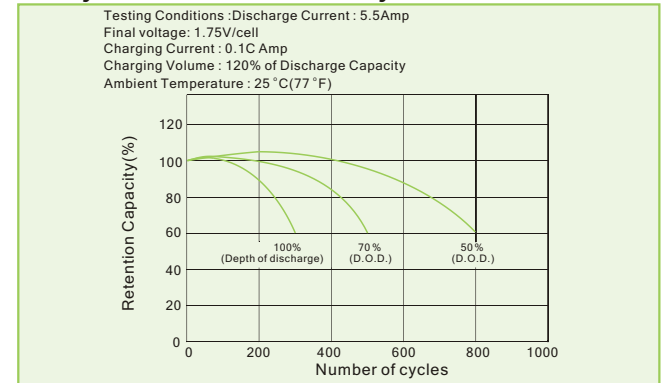
### Battery Charging Characteristics



### 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 cycle service	Constant voltage & Constant current charging (with current restriction)	2.45~2.50	-4	4.2	16	10	0~40 (32~104°F)

### Battery Life Characteristics of Cyclic Use



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

Discharge Time \ F.V. (V/cell)	10 Min	15 Min	30 Min	40 Min	1 Hr	2 Hr	3 Hr	5 Hr	10 Hr	20 Hr
1.80V	450.8	350.6	200.4	166.4	112.0	66.7	43.6	29.8	15.72	8.23
1.75V	488.4	367.1	208.1	172.4	115.3	68.4	44.4	30.2	15.96	8.40
1.70V	506.0	378.2	212.7	176.0	117.3	69.2	44.9	30.5	16.04	8.44
1.65V	518.1	387.1	215.8	178.4	118.9	70.2	45.3	30.7	16.08	8.46
1.60V	528.3	394.7	218.0	180.2	120.1	70.5	45.5	30.7	16.08	8.46
1.50V	538.9	402.6	220.2	182.0	121.4	71.2	45.8	30.7	16.08	8.46

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

Discharge Time \ F.V. (V/cell)	10 Min	15 Min	30 Min	40 Min	1 Hr	2 Hr	3 Hr	5 Hr	10 Hr	20 Hr
1.80V	39.7	30.5	17.9	14.4	9.4	5.85	3.63	2.49	1.310	0.686
1.75V	43.1	31.8	18.7	14.9	9.6	6.00	3.72	2.52	1.330	0.700
1.70V	44.6	32.9	19.1	15.2	9.9	6.07	3.74	2.53	1.336	0.702
1.65V	45.8	33.6	19.3	15.5	10.0	6.16	3.76	2.54	1.342	0.706
1.60V	46.7	34.2	19.6	15.6	10.1	6.18	3.79	2.55	1.342	0.706
1.50V	47.6	34.9	19.7	15.7	10.2	6.25	3.81	2.55	1.342	0.706

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

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