

VRLA Rechargeable Battery

BP40-12FR

FEATURES

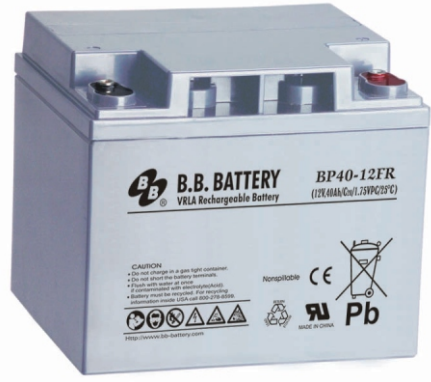
- Maintenance free(no water topping-up required)
- No free acid(Non-spillable battery)
- Can be used in any orientation(excluding used inverted)
- Absorbent Glass Mat technology for efficient gas recombination
- Its design life is up to 8 years in floating application

APPLICATIONS

- UPS
- Electronic Medical Equipment
- Wheelchairs
- Golf-Carts
- Lawn Mowers

SPECIFICATIONS

Nominal Voltage	12V	
Nominal Capacity	20 Hour Rate (2000mA, 10.5V)	40 Ah
	10 Hour Rate (3800mA, 10.5V)	38 Ah
	5 Hour Rate (6800mA, 10.5V)	34 Ah
	1 Hour Rate (24000mA,9.3V)	24 Ah
Approx. Weight	14300g(31.53lbs.)	
Terminals	B2 (Fitting M5 bolt & nut) , I1 and I2 are optional	
Max. Discharge Current	600 A (5 sec.)	
Max. Charge Current	12 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	≤8mΩ (Fully Charged)	



CONTAINER MATERIAL

- Standard: ABS(UL94 HB)
Model Name: BP40-12
- Optional: Flame Retardant ABS (UL94 V-0)
Model Name: BP40-12FR

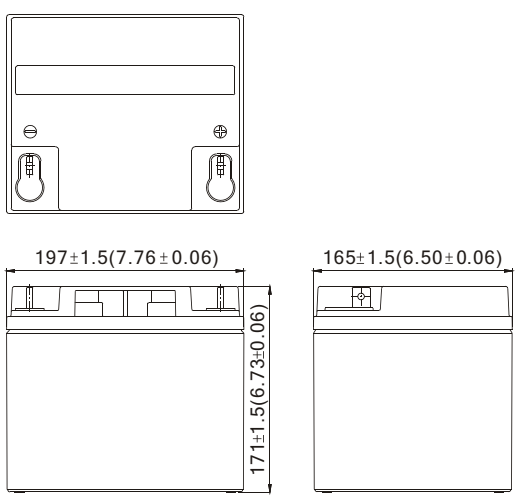
Certificate as below:



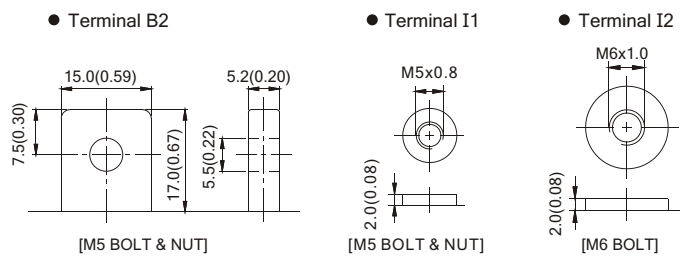
Compliance of the standards as below:

- IEC 61056-1
- JIS C 8702-1
- GB/T 19639.1
- VdS G102110

OUTER DIMENSIONS mm(inch)	Length (L)	Width (W)	Container Height (H)	Total Height (TH)
	197±1.5(7.76±0.06)	165±1.5(6.50±0.06)	171±1.5(6.73±0.06)	171±1.5(6.73±0.06)

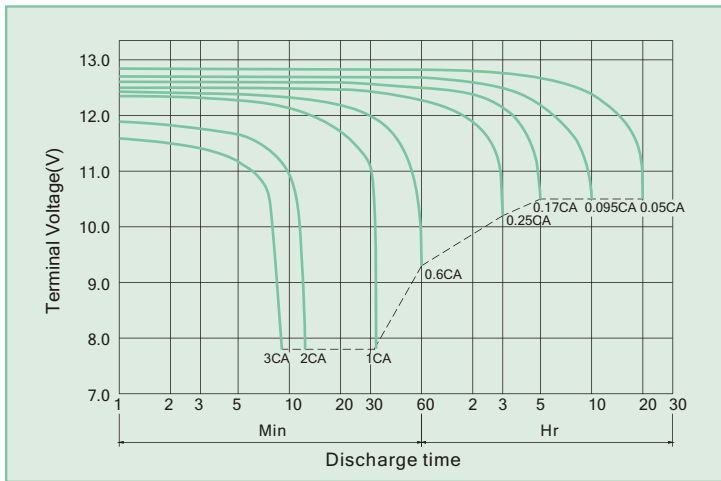


TERMINAL TYPE

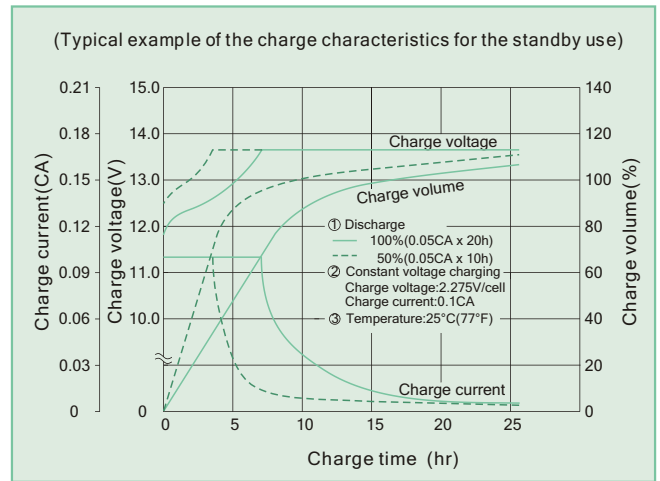


Terminal Hardware Initial Torque:
B2,I1(4.0Nm±5%),I2(5.5Nm±5%)

BP40-12 (BP40-12FR) discharge characteristics (25°C/77°F)



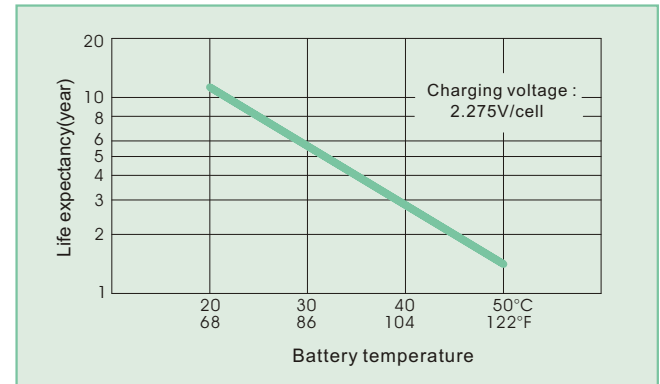
Battery Charging Characteristics



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	

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	5 Min	10 Min	15 Min	30 Min	1 Hr	3 Hr	5 Hr	10 Hr	20 Hr
1.80V	1280	1007	811	508	291.1	116.6	80.4	44.93	23.64
1.75V	1482	1091	848	527	299.9	118.9	81.6	45.60	24.00
1.70V	1575	1130	874	539	305.2	120.0	82.0	45.83	24.12
1.65V	1645	1157	894	547	308.9	120.8	82.3	45.96	24.19
1.60V	1700	1180	912	552	312.0	121.6	82.6	45.96	24.19

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

F.V. (V/cell) \ Discharge Time	5 Min	10 Min	15 Min	30 Min	1 Hr	3 Hr	5 Hr	10 Hr	20 Hr
1.80V	115	88.6	70.5	43.0	24.46	9.72	6.70	3.74	1.97
1.75V	136	96.0	73.7	44.7	25.20	9.91	6.80	3.80	2.00
1.70V	144	99.5	76.0	45.7	25.65	10.00	6.84	3.82	2.01
1.65V	151	101.8	77.7	46.3	25.96	10.07	6.86	3.83	2.02
1.60V	156	103.9	79.3	46.8	26.22	10.13	6.88	3.83	2.02

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

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