



Measures

Technology

Values

Innovation



## VRLA Rechargeable Battery

# BPS120-12 (BPS120-12FR)

### FEATURES

- Maintenance free(no water topping-up required)
- No free acid(Non-spillable battery)
- Can be used in any orientation(excluding used inverted)
- Flame-arrestor is installed to ensure safety
- Carry handles for easy installation
- Absorbent Glass Mat technology for efficient gas recombination

### APPLICATION

- UPS
- Golf-Carts
- Telecom



### SPECIFICATIONS

Nominal Voltage	12V	
Nominal Capacity	20 Hour Rate (6.0A, 10.5V)	120 Ah
	10 Hour Rate (11.4A, 10.5V)	114 Ah
	5 Hour Rate (20.4A, 10.5V)	102 Ah
	1 Hour Rate (72.0A, 9.3V)	72 Ah
Approx. Weight	39.5Kg(87.1lbs.)	
Terminals	B4 (Fitting M6 bolt & nut) I2 is optional	
Max. Discharge Current	800 A (5 sec.)	
Max. Charge Current	36 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	≤ 4mΩ (Fully Charged )	

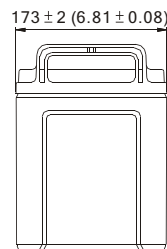
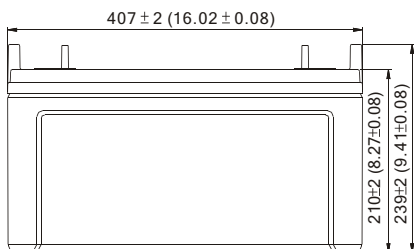
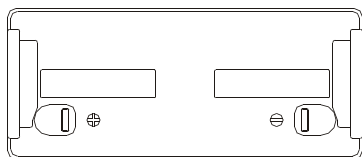
### CONTAINER MATERIAL

- BPS120-12:  
ABS: UL 94-HB (Dark gray color)
- BPS120-12FR:  
ABS: UL 94-V0 (Light gray color)

 ISO 9001	 ISO14001
 UL	 CE
<ul style="list-style-type: none"> <li>● IEC60896</li> <li>● GB/T 19638</li> </ul>	<ul style="list-style-type: none"> <li>● JIS C 8704</li> </ul>

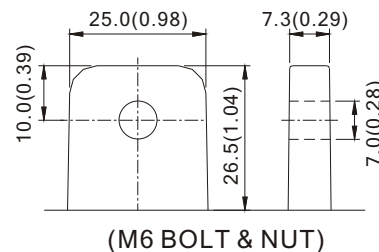
### OUTER DIMENSIONS mm(inch)

Length (L)	Width (W)	Container Height (H)	Total Height (TH)
407±2.0(16.02±0.08)	173±2.0(6.81±0.08)	210±2.0(8.27±0.08)	239±2.0(9.41±0.08)

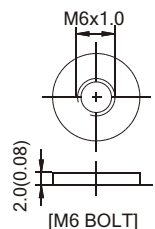


### TERMINAL TYPE

- Terminal B4

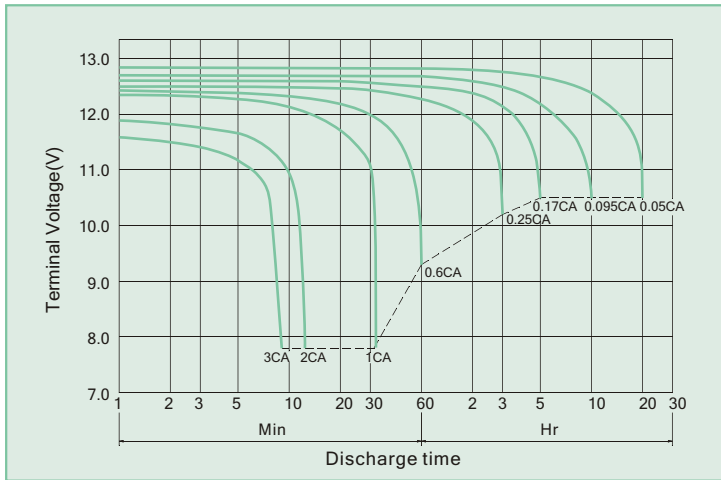


- Terminal I2

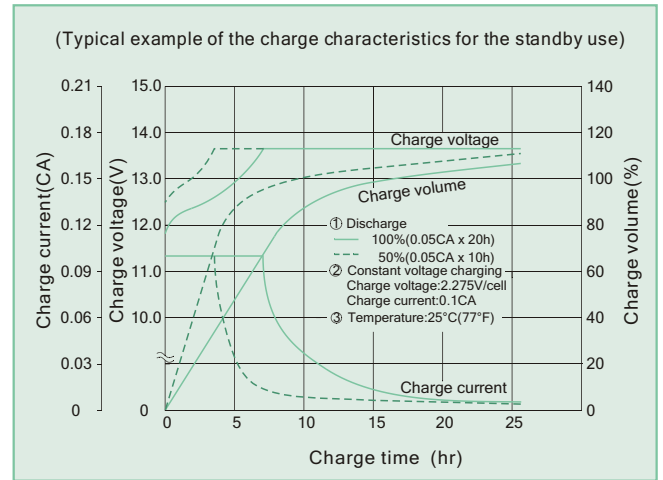


Terminal Hardware Initial Torque: B4,I2(5.5Nm±5%)

**BPS120-12 (BPS120-12) discharge characteristics (25°C /77°F)**



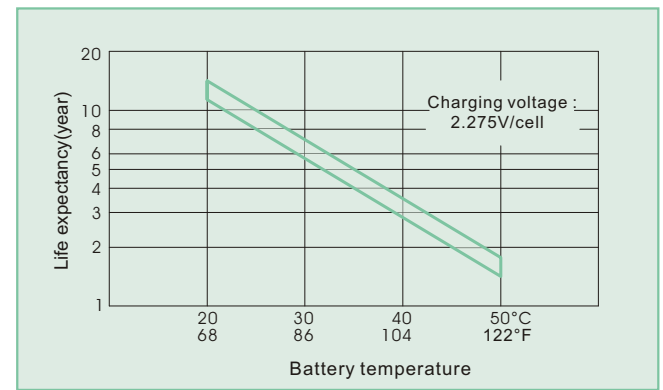
**Battery Charging Characteristics**



**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	10 Min	15 Min	30 Min	1 Hr	3 Hr	5 Hr	10 Hr	20 Hr
1.80V	2821	2346	1523	873.4	349.8	241.2	134.8	70.92
1.75V	3057	2454	1581	899.6	356.8	244.8	136.8	72.00
1.70V	3166	2530	1617	915.7	360.0	246.1	137.5	72.36
1.65V	3242	2588	1640	926.7	362.5	247.2	137.9	72.58
1.60V	3307	2640	1656	936.0	364.7	247.7	137.9	72.58

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

F.V. (V/cell) \ Discharge Time	10 Min	15 Min	30 Min	1 Hr	3 Hr	5 Hr	10 Hr	20 Hr
1.80V	248	204	129	73.4	29.1	20.10	11.23	5.91
1.75V	269	213	134	75.6	29.7	20.40	11.40	6.00
1.70V	279	220	137	77.0	30.0	20.51	11.46	6.03
1.65V	285	225	139	77.9	30.2	20.60	11.49	6.05
1.60V	291	230	140	78.7	30.4	20.64	11.49	6.05

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

A/0 REV. Aug. 2009