VRLA Rechargeable Battery

BPS90-12

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
- Designed life time 12 years in 20ºC

APPLICATION

- UPS
- Golf-Carts
- Telecom

SPECIFICATIONS

Nominal Voltage	12V	
Nominal Capacity	20 Hour Rate (4.50A, 10.5V) 10 Hour Rate (8.55A, 10.5V) 5 Hour Rate (15.30A, 10.5V) 1 Hour Rate (54.00A,9.3V)	90.0 Ah 85.5 Ah 76.5 Ah 54.0 Ah
Approx. Weight	30.8Kg	
Terminals	B3 (Fitting M6 bolt & nut) I2 is optional	
Max. Discharge Current	800 A (5 sec.)	
Max. Charge Current	27 A	
Operating Temperature Range	Charge Discharge Storage	0°C~40°C -20°C~50°C -20°C~40°C
Self Discharge	< 3% per month (25°C)	
Internal Resistance	≦ 5m Ω (Fully Charged)	

CONTAINER MATERIAL

- Standard: ABS(UL 94-HB)
  Model Name: BPS90-12
- Optional: Flame Retardant ABS(UL 94-V0)
  Model Name: BPS90-12FR

Certificate as below:

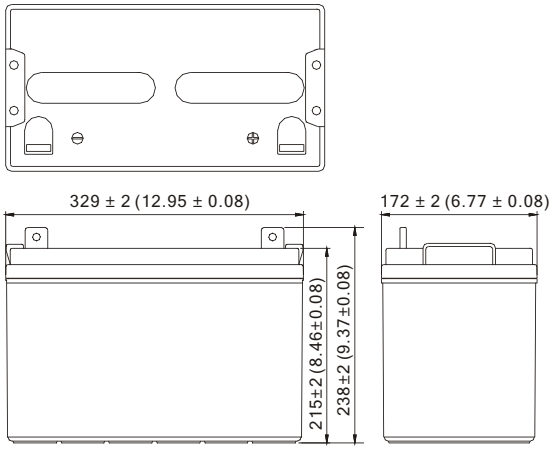
MH19884

Compliance of the standards as below:

- IEC 60896-21/22
- JIS C 8704-2
- GB/T 19638.2

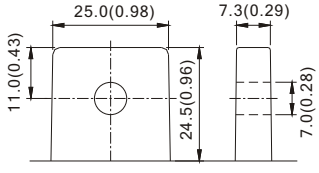
OUTER DIMENSIONS mm

Length (L)	Width (W)	Container Height (H)	Total Height (TH)
329±2.0	172±2.0	215±2.0	B3: 238±2.0 I2: 218.5±2.0



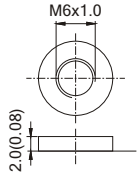
TERMINAL TYPE

- Terminal B3



[M6 BOLT & NUT]

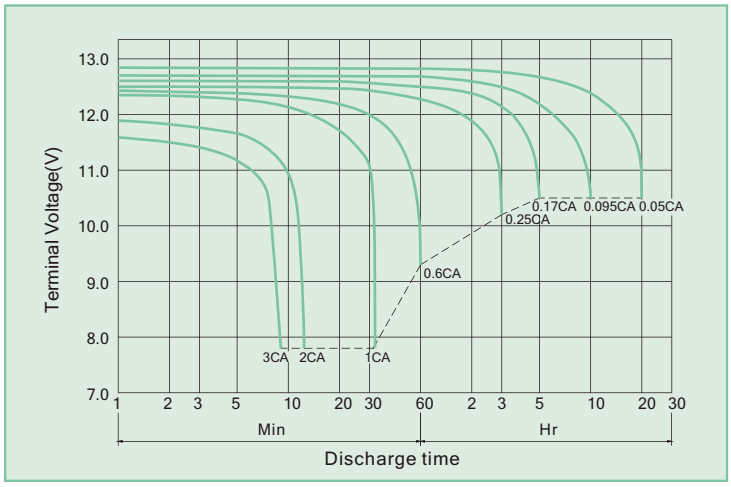
- Terminal I2



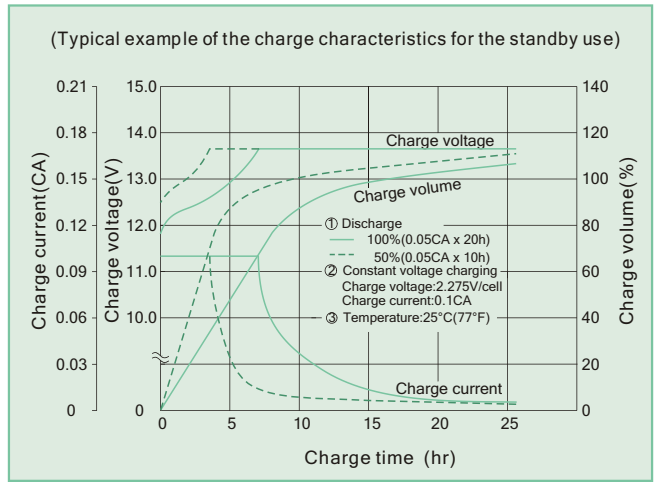
[M6 BOLT]

Terminal Hardware Initial Torque: B3,I2(5.5Nm±5%)

BPS90-12 (BPS90-12FR) discharge characteristics (25°C)



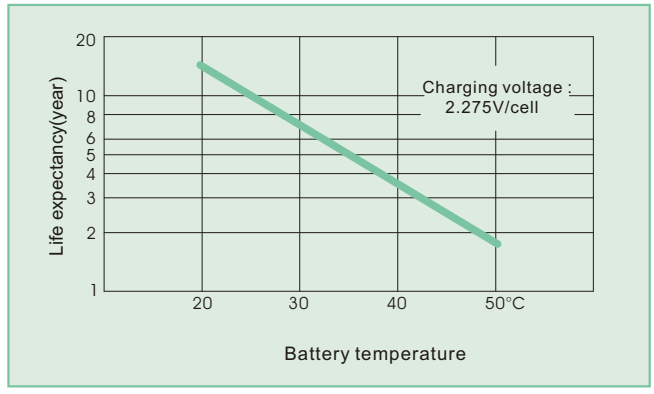
Battery Charging Characteristics



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
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 *Unit: W*

F.V. (V/cell) \ Discharge Time	15 Min	30 Min	1 Hr	3 Hr	5 Hr	10 Hr	20 Hr
1.80V	1877	1142	655.0	262.3	180.9	101.08	53.19
1.75V	1963	1186	674.7	267.6	183.6	102.60	54.00
1.70V	2024	1213	686.8	270.0	184.6	103.11	54.28
1.65V	2071	1230	695.0	271.9	185.2	103.42	54.43
1.60V	2112	1242	702.0	273.5	185.8	103.42	54.43

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

F.V. (V/cell) \ Discharge Time	15 Min	30 Min	1 Hr	3 Hr	5 Hr	10 Hr	20 Hr
1.80V	166.1	96.8	55.04	21.86	15.07	8.42	4.43
1.75V	173.7	100.5	56.70	22.30	15.30	8.55	4.50
1.70V	179.1	102.8	57.71	22.50	15.38	8.59	4.52
1.65V	183.2	104.2	58.41	22.66	15.44	8.62	4.54
1.60V	186.9	105.3	58.99	22.79	15.48	8.62	4.54

All data and artworks shall be changed without prior notice, BB reserves the right to explain and update the information contained hereinto.
For operation, please refer to the instruction from technical manual.

B/1 REV. Apr. 2019

Your local distributor Wamtechnik Sp. z o.o.
http://wamtechnik.pl

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