



VRLA Rechargeable Battery

BPS33-12 (BPS33-12FR)

Standard Type

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

APPLICATION

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

SPECIFICATIONS

Nominal Voltage	12V	
Nominal Capacity	20 Hour Rate (1650mA, 10.5V)	33.0 Ah
	10 Hour Rate (3140mA, 10.5V)	31.4 Ah
	5 Hour Rate (5610mA, 10.5V)	28.1 Ah
	1 Hour Rate (19800mA, 9.3V)	19.8 Ah
Approx. Weight	11250g(24.81lbs.)	
Terminals	B7 (Fitting M6 bolt & nut)	
Max. Discharge Current	495 A (5 sec.)	
Max. Charge Current	9.9 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	≤ 9m Ω (Fully Charged)	



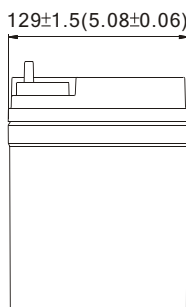
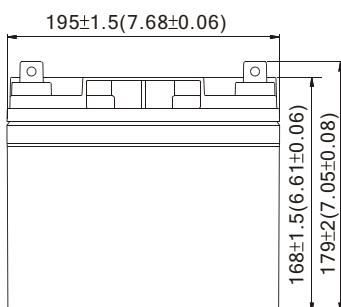
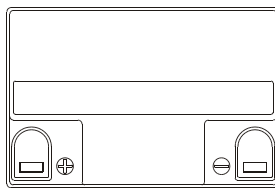
CONTAINER MATERIAL

- BPS33-12:
ABS: UL 94-HB (Dark gray color)
- BPS33-12FR:
ABS: UL 94-V0 (Light gray color)

 ISO 9001	 ISO14001
 MH19884 UL	 C4M20310-2474-E-16 CE
<ul style="list-style-type: none"> ● IEC61056 ● GB/T 19639 	<ul style="list-style-type: none"> ● JIS C 8702

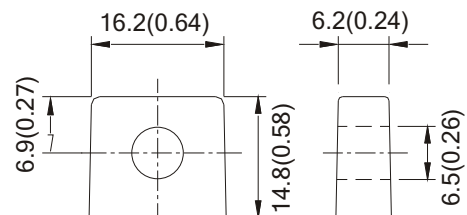
OUTER DIMENSIONS mm(inch)

Length (L)	Width (W)	Container Height (H)	Total Height (TH)
195±1.5(7.68±0.06)	129±1.5(5.08±0.06)	155±1.5(6.10±0.06)	179±2.0(7.05±0.08)



TERMINAL TYPE

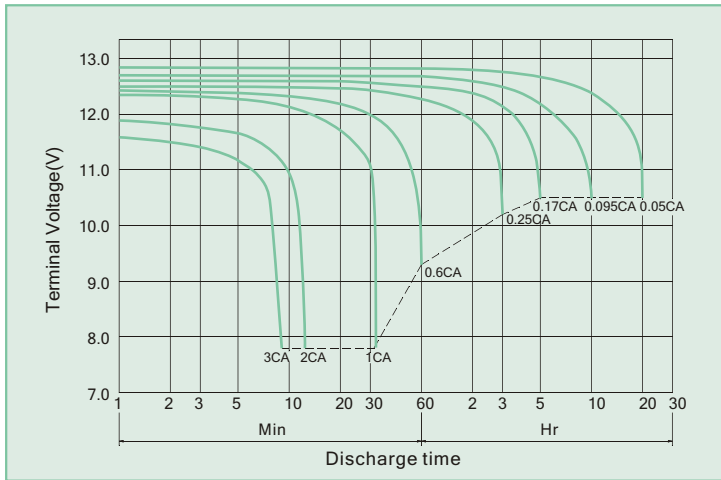
- Terminal B7



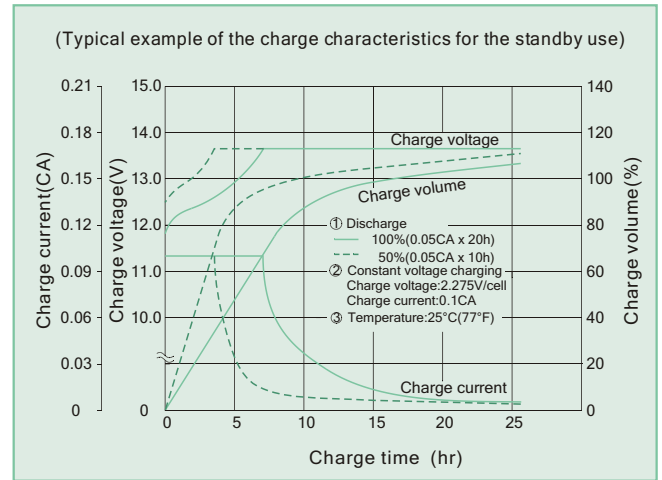
[M6 BOLT & NUT]

Terminal Hardware Initial Torque: B7(5.5Nm±5%)

BPS33-12 (BPS33-12FR) discharge characteristics (25°C /77°F)



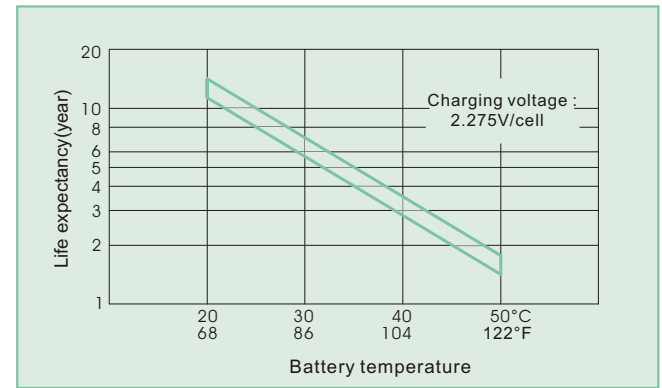
Battery Charging Characteristics



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	1193	878	704	419	240.2	96.2	66.3	37.06	19.50
1.75V	1381	952	736	435	247.4	98.1	67.3	37.62	19.80
1.70V	1467	986	759	445	251.8	99.0	67.7	37.81	19.90
1.65V	1533	1009	776	451	254.9	99.7	67.9	37.92	19.96
1.60V	1584	1030	792	455	257.4	100.3	68.1	37.92	19.96

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	107.5	77.3	61.2	35.5	20.18	8.02	5.53	3.09	1.63
1.75V	126.7	83.8	64.0	36.8	20.79	8.18	5.61	3.13	1.65
1.70V	134.6	86.8	66.0	37.7	21.16	8.25	5.64	3.15	1.66
1.65V	140.7	88.9	67.5	38.2	21.42	8.31	5.66	3.16	1.66
1.60V	145.3	90.6	68.9	38.6	21.63	8.36	5.68	3.16	1.66

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

USA:
 B&B BATTERY(USA) INC.
 6415 RANDOLPH ST.COMMERCE, CA,90040 U.S.A.
 TEL:1-323-278-1900.1-800-278-8599
 FAX:1-323-278-1268
 E-Mail:sales@bb-battery.com

CHINA FACTORY:
 B.B. BATTERY CO., LTD.
 CHENG DONG TRIAL AREA,HUANG GANG,
 RAOPING, GUANG DONG,CHINA,515700
 TEL:86-768-7601001-2
 FAX:86-768-7601469
 E-Mail:maggy@bb-battery.com

EUROPE:
 B&B BATTERY(EUROPE) B.V.
 LAAN VAN KRONENBRUG 8, 1183AS
 AMSTELVEEN, THE NETHERLANDS
 TEL: +852-91282711
 MOBILE: +852-91282711
 E-Mail: dliu@bb-battery.com

HONG KONG:
 NATIONAL TRADING LTD.
 TEL:852-2301-3800
 FAX:852-2739-1182
 E-Mail:bbhk@hkstar.com

JAPAN:
 B&B BATTERY(JAPAN) CO., LTD.
 1375-11 NARAHARA-MACHI,HACHIOJI,
 TOKYO 193-0803,JAPAN.
 TEL:81-426-25-6375
 FAX:81-426-25-6375
 E-Mail:miyata@bb-battery.com

TAIWAN:
 B.B. BATTERY(TAIWAN) CO., LTD.
 TEL:886-6-502-5150
 FAX:886-6-589-8087
 E-Mail:maggy@bb-battery.com