



Maintenance-Free Rechargeable Sealed Lead-Acid Battery



HR33-12

(132W/Cell 15Min Rate)

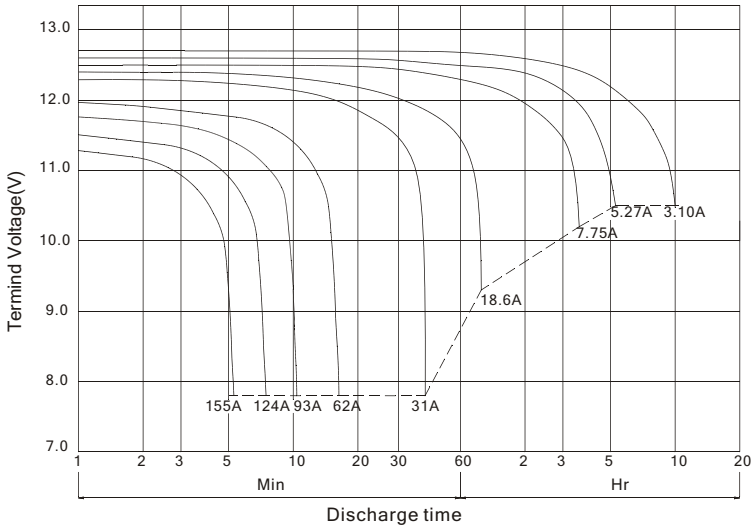
For High Rate Discharge

The battery is constructed by plates, separators, safety valves and container. Since the electrolyte is held by a glass-mat separator and plates, the battery can use in any direction and position without leakage.

PERFORMANCE SPECIFICATIONS

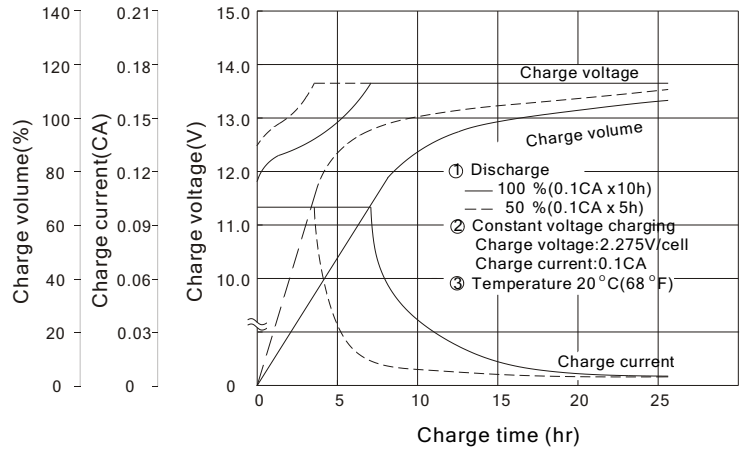
Nominal Voltage(V).....	12 volts(6cells in series)
Nominal Capacity(AH)	
10 Hour rate F.V.(1.75V/cell) (3.1A to 10.50volts)	31.0A.H.
15 Min rate F.V.(1.30V/cell) (792W to 7.80volts)	16.5A.H.
Approximate Weight	10000g(22.05lbs.)
Terminal	
Standard.....	Type B1
Optional.....	Type T2.I1
Internal Resistance (Fully Charged Battery).....	<7m Ω
Maximum Discharge Current For 5 sec.(A).....	420A
Maximum Charge Current(A).....	9.30A
Ambient Temperature	
Charge.....	0°C(32°F)~40°C(104°F)
Discharge.....	-20°C(-4°F)~50°C(122°F)
Storage.....	-20°C(-4°F)~40°C(104°F)
Vibration test:	
Frequency: 16.7HZ	
Amplitude: 4mm	
Vibrate the battery horizontally or vertically for 60 minutes. The battery have no abnormality.	
Case.....	ABS
Dimension(mm/inch)	
Length ±1.5mm.....	175/6.89
Width ±1.5mm.....	166/6.54
Container Height ±1.5mm.....	125/4.92
Total Height ±1.5mm.....	125/4.92
Application.....	UPS, Wheelchairs, Lawn Mowers, Electronic Medical Equipment, Golf-Carts.

HR33-12 Battery discharge characteristics (25 °C/77 °F)



Battery Charging Characteristics

(Typical example of the charge characteristic for the standby use)

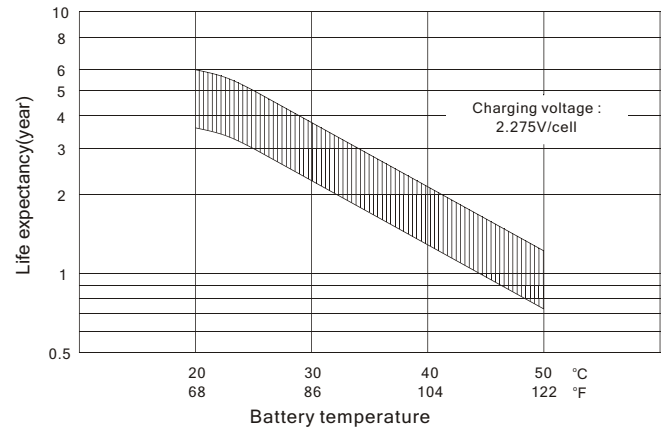


Charging Procedure

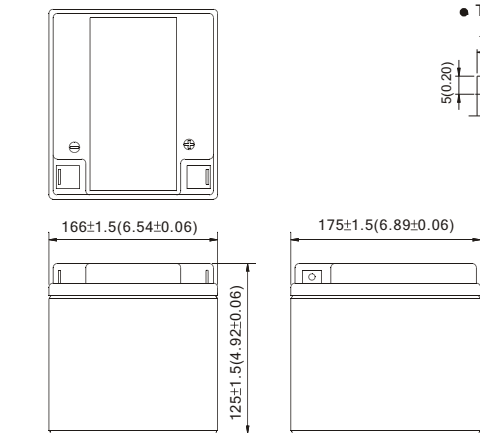
Application	Charging method	Charging Voltage at 20 °C (V/cell)	Temperature compensation coefficient of charging voltage (mV/°C/cell)	Max. charging current (CA)	Charging time 0.1CA, 20 °C (h)		Temp (°C)
					100% discharge	50% discharge	
For standby power source	Constant voltage & Constant current charging (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	

*Temperature compensation of charging voltage is not needed, when using the batteries within 5 °C to 35 °C range.

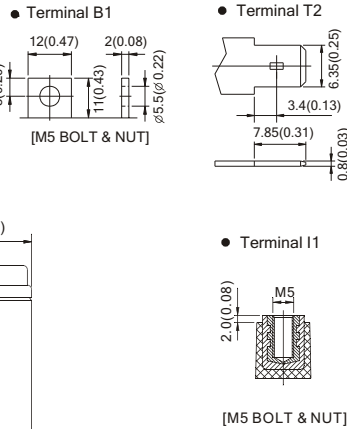
Effect of Temperature on Long Term Float Life



OUTER DIMENSIONS



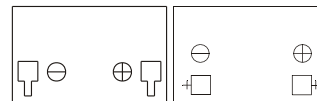
TERMINAL TYPE



Constant power discharge characteristics at 25°C/77°F

Final Voltage	Discharge time							
	5Min	10Min	15Min	20Min	30Min	40Min	50Min	60Min
10.80V	1353	924	669	571	434	330	276	243
10.20V	1617	1031	728	605	452	342	285	248
9.60V	1733	1085	761	627	462	351	290	252
9.00V	1782	1106	777	637	468	355	294	255
8.40V	1815	1120	786	643	471	357	296	257
7.80V	1832	1130	792	647	474	359	298	257

TERMINAL POSITION



B.B. BATTERY CO., LTD.

Web Site: <http://www.bb-battery.com>

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

EUROPE:
 B&B BATTERY(EUROPE) B.V.
 3 WIJNGAARDVELD, 9300 AALST,BELGIUM
 TEL:(00)32-53781567
 FAX:(00)32-53781567
 E-Mail:hansdevriese@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

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:81-426-256-537
 FAX:81-426-256-537
 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

