



## Maintenance-Free Rechargeable Sealed Lead-Acid Battery



# HR22-12

(88W/Cell 15Min Rate)

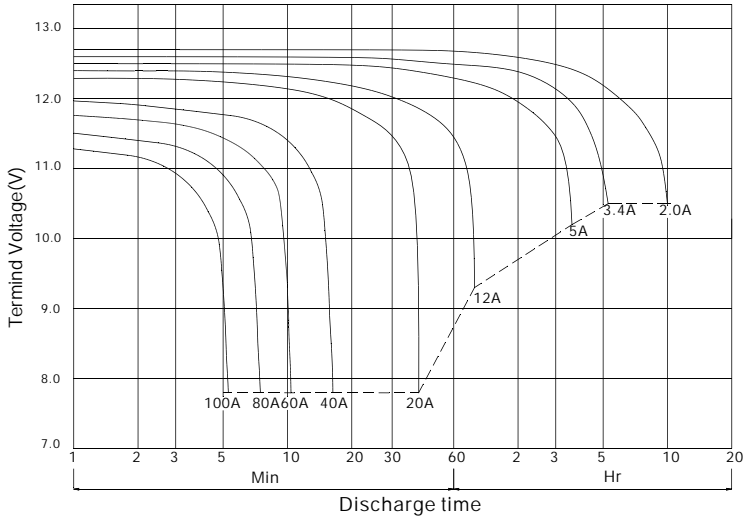
For High Rate Discharge

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

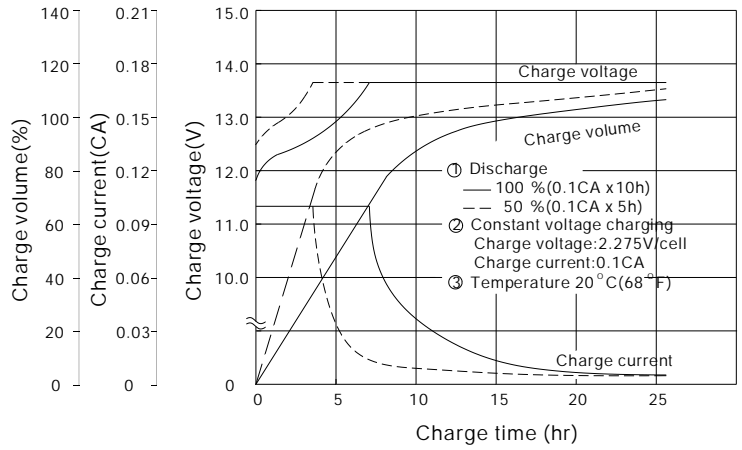
Nominal Voltage(V).....	12 volts(6cells in series)
Nominal Capacity(AH)	
10 Hour rate F.V.(1.75V/cell) (2.0A to 10.50volts) .....	20.0A.H.
15 Min rate F.V.(1.30V/cell) (528W to 7.80volts) .....	11.0A.H.
Approximate Weight .....	6500g(14.33lbs.)
Terminal	
Standard.....	Type B1
Optional.....	Type T2.I1
Internal Resistance (Fully Charged Battery).....	<9m Ω
Maximum Discharge Current For 5 sec.(A).....	300A
Maximum Charge Current(A).....	6.0A
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.....	181/7.13
Width           ±1.5mm.....	76/2.99
Container Height ±1.5mm.....	166/6.54
Total Height   ±1.5mm.....	166/6.54
Application.....	UPS, Fishing Lights, Booster, Emergency Lights, Lawn Mowers, Video Camcorders(VCR).

## HR22-12 Battery discharge characteristics (25 °C/77 °F)



## Battery Charging Characteristics

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

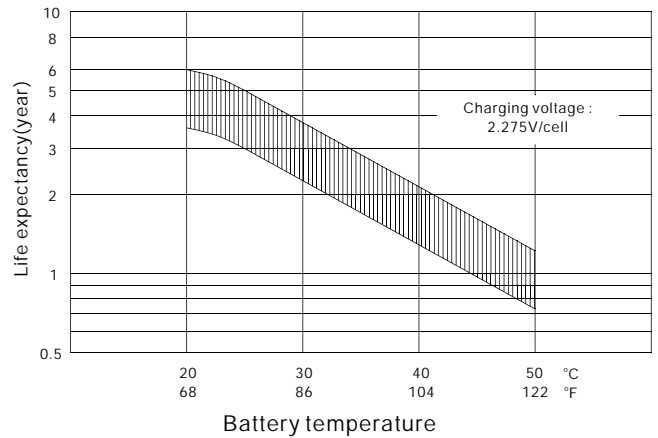


## Charging Procedure

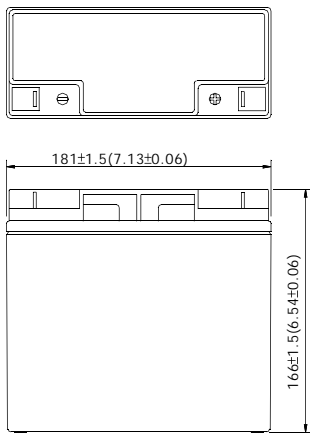
Application	Charging method	Charging Voltage at 20 °C (V/cell)	Temperature compensation coefficient of charging voltage (mV/°C/cell)	Max. charging current (CA)	Charging time 0.1CA, 20 °C (h)		Temp [°C]
					100% discharge	50% discharge	
For standby power Source	Constant voltage & Constant current charging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

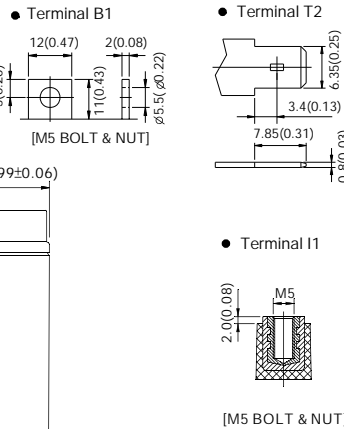
## Effect of Temperature on Long Term Float Life



## OUTER DIMENSIONS



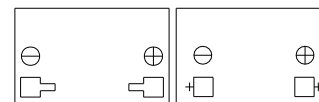
## TERMINAL TYPE



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

Final Voltage	Discharge time							
	5Min	10Min	15Min	20Min	30Min	40Min	50Min	60Min
10.80V	902	616.0	446.1	380.6	289.3	220.0	183.7	161.7
10.20V	1078	687.5	485.1	403.2	301.4	228.3	189.8	165.6
9.60V	1155	723.3	507.1	418.0	308.0	233.8	193.6	168.3
9.00V	1188	737.0	518.1	424.6	311.9	236.5	195.8	170.0
8.40V	1210	746.9	524.2	428.5	314.1	238.2	197.5	171.1
7.80V	1221	753.5	528.0	431.2	315.7	239.3	198.6	171.6

## 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

### CHINA FACTORY:

CHENG DONG TRIAL AREA, HUANG GANG,  
RAOPING GUANG DONG, CHINA, 515700  
TEL: 86-768-7601001-2  
FAX: 86-768-7601469

### UK:

B & B BATTERY (UK) CO., LTD.  
TEL: 44-161-339-9458  
FAX: 44-161-343-7030

### HONG KONG:

NATIONAL TRADING LTD.  
TEL: 852-2301-3800  
FAX: 852-2739-1182

### JAPAN:

B & B BATTERY (JAPAN) CO., LTD.  
TEL: 81-426-256-537  
FAX: 81-426-256-537

### TAIWAN:

B & B BATTERY CO., LTD.  
TEL: 886-6-5898081-3  
FAX: 886-6-5898087

