



# Maintenance-Free Rechargeable Sealed Lead-Acid Battery



## HR50-12 (200W/Cell 15Min Rate)

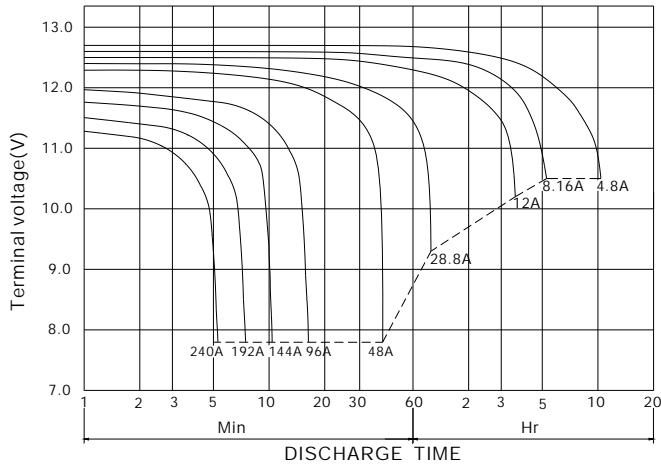
### For High Rate Discharge

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

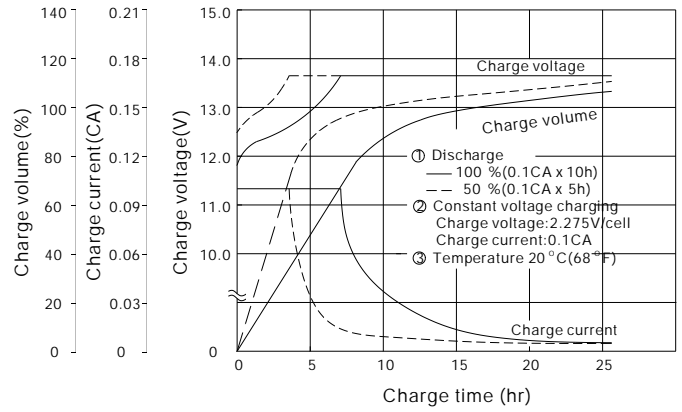
Nominal Voltage(V).....	12 volts(6cells in series)
Nominal Capacity(AH)	
10 Hour rate F.V.(1.75V/cell) (4.80A to 10.50volts).....	48.0A.H.
15 Min rate F.V.(1.30V/cell) (1200W to 7.80volts) .....	25.0A.H.
Approximate Weight .....	15.3Kg(33.74lbs.)
Terminal	
Standard.....	Type B2
Optional.....	Type I1
Internal Resistance (Fully Charged Battery).....	<5mΩ
Maximum Discharge Current For 5 sec.(A).....	600A
Maximum Charge Current(A).....	14.4A
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.....	197/7.76
Width           ±1.5mm.....	165/6.50
Container Height ±1.5mm.....	171/6.73
Total Height   ±2mm.....	171/6.73
Application.....	UPS, Wheelchairs, Golf-Carts.

## HR50-12 Battery discharge characteristics (25 °C/77 °F)



## Battery Charging Characteristics

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

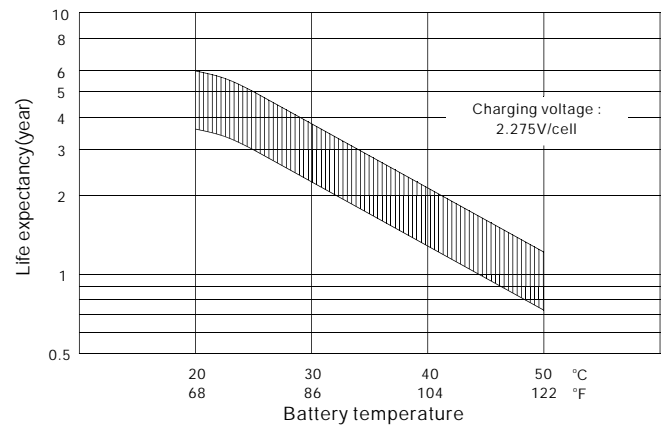


## Charging Procedure

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	

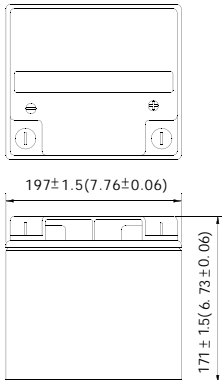
\*Temperature compensation of charging voltage is not needed when using the batteries within 5 °C to 35 °C range.

## Effect of Temperature on Long Term Float Life



## OUTER DIMENSIONS

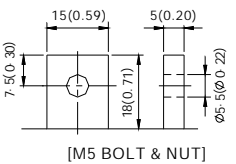
mm(inch)



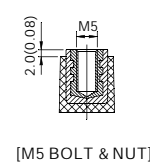
## TERMINAL TYPE

mm(inch)

● Terminal B2



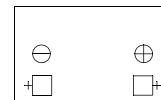
● Terminal I1



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

Final Voltage	Discharge time							
	5Min	10Min	15Min	20Min	30Min	40Min	50Min	60Min
10.80V	2050	1400	1014	865	658	500	418	368
10.20V	2450	1563	1103	916	685	519	431	376
9.60V	2625	1644	1153	950	700	531	440	383
9.00V	2700	1675	1178	965	709	538	445	386
8.40V	2750	1698	1191	974	714	541	449	389
7.80V	2775	1713	1200	980	718	544	451	390

## TERMINAL POSITION



B.B. BATTERY CO., LTD. Web Site: <http://www.bb-battery.com>

### USA :

B&B BATTERY (USA) INC.  
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CA, 90040 U.S.A.  
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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:

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FAX: 81-426-256-537

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