



## VRLA Rechargeable Battery

# HRC5.5-12 (HRC5.5-12FR)

### FEATURES

- Maintenance free(no water topping-up required)
- No free acid(Non-spillable battery)
- Can be used in any orientation(excluding used inverted)
- The battery is designed for high rate usage
- Its design life is up to 5 years in floating application
- Absorbent Glass Mat technology for efficient gas recombination
- The power density at 5 min~15min discharging rate is 30% higher than BP series

### APPLICATION

- UPS
- Emergency Lights
- Toy-Cars
- Fishing Lights
- Power Packs



### SPECIFICATIONS

Nominal Voltage	12V	
Nominal Capacity	10 Hour Rate (500mA, 10.5V)	5.00 Ah
	15 Min Rate (132W, 7.8V)	2.75 Ah
Approx. Weight	1620g(3.57lbs.)	
Terminals	T1 (Faston Tab 187) T2 is optional	
Max. Discharge Current	75 A (5 sec.)	
Max. Charge Current	1.50 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	≤ 27mΩ (Fully Charged )	

### CONTAINER MATERIAL

- HRC5.5-12:  
ABS: 94-HB (Dark gray color)
- HRC5.5-12FR:  
ABS: 94-V0 (Light gray color)

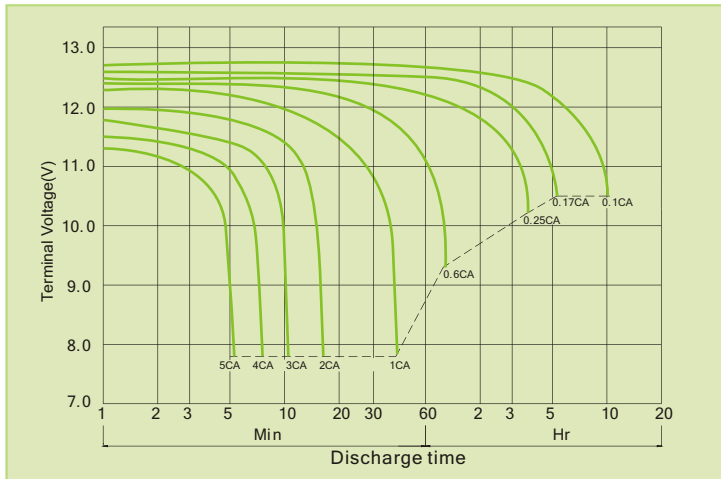
 ISO 9001	 ISO 14001	 ISO 14001	 CE
 IEC61056		 JIS C 8702	
 GB/T 19639			

OUTER DIMENSIONS mm(inch)	Length (L)	Width (W)	Container Height (H)	Total Height (TH)
	90±1.5(3.54±0.06)	70±1.5(2.76±0.06)	102±1.5(4.02±0.06)	106±2.0(4.17±0.08)

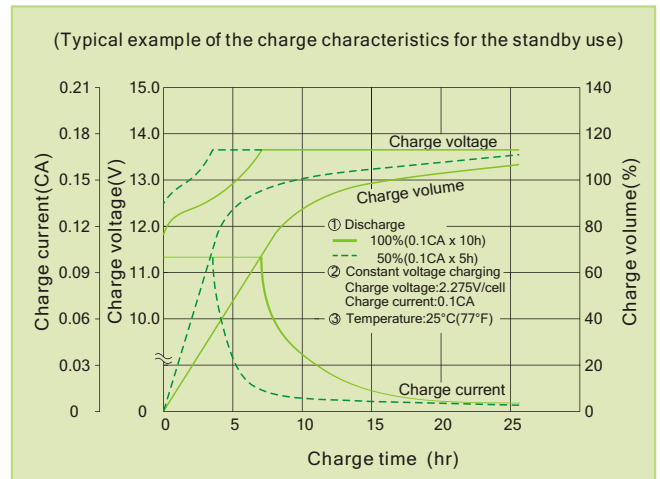
### TERMINAL TYPE

- Terminal T1
- Terminal T2

### HRC5.5-12 (HRC5.5-12FR) discharge characteristics (25°C/77°F)



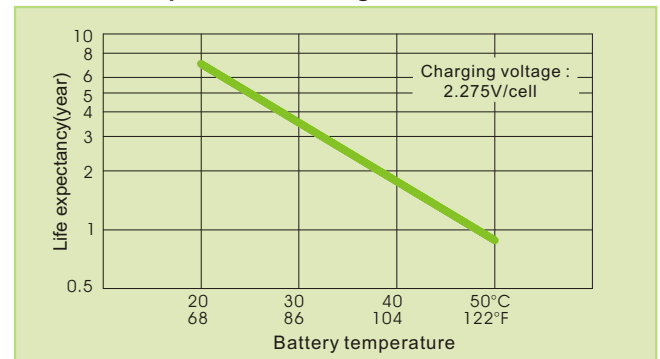
### Battery Charging Characteristics



### 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	20 Min	30 Min	40 Min	50 Min	60 Min	120 Min
1.80V	225.5	154.0	111.5	95.2	72.4	55.0	46.0	40.5	22.3
1.70V	269.5	171.9	121.3	100.8	75.4	57.1	47.4	41.4	22.7
1.60V	288.8	180.8	126.8	104.5	77.0	58.4	48.4	42.1	23.1
1.50V	297.0	184.3	129.6	106.2	78.0	59.2	49.0	42.5	23.2
1.40V	302.5	186.8	131.0	107.1	78.5	59.5	49.4	42.8	23.3
1.30V	305.3	188.4	132.0	107.8	79.0	59.8	49.6	42.9	23.3

### Constant current discharge characteristics at 25°C/77°F Unit: A

F.V. (V/cell) \ Discharge Time	5 Min	10 Min	15 Min	20 Min	30 Min	40 Min	50 Min	60 Min	120 Min
1.80V	20.13	13.51	9.65	8.16	6.14	4.63	3.85	3.38	1.86
1.70V	24.50	15.08	10.49	8.64	6.39	4.80	3.97	3.45	1.89
1.60V	26.25	15.86	10.97	8.96	6.53	4.91	4.05	3.51	1.93
1.50V	27.00	16.17	11.21	9.11	6.61	4.98	4.10	3.54	1.93
1.40V	27.50	16.39	11.33	9.19	6.65	5.00	4.13	3.57	1.94
1.30V	27.75	16.53	11.42	9.25	6.69	5.03	4.15	3.58	1.94

All data shall be changed without prior notice, BB reserves the right to explain and update the information contained herein.

Trials A/1 REV. Dec. 2010

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