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## Nickel-Metal Hydride Rechargeable Batteries H320BC

## 1 Scope

This specification is applicable to the "Vinnic®" brand Nickel -Metal Hydride rechargeable batteries for type H320BC

Chung Pak model: H320BC

## **2 Technical Parameters**

Items	Units	Parameters	Conditions and others
Nominal Voltage	V	1.2	Unit cell
Capacity a.nominal capacity	mAh	320	Standard charge/discharge
b.typical capacity	mAh	340	Standard charge/discharge
Charging Method a. standard charge	mA	32(0.1C)	Charge at 20±5℃ Charging temperature : 0∼+45℃
	h	14~16	
b. accelerated charge	mA	64(0.2C)	Charge at 20±5℃ Charging temperature : 10∼+45℃
	h	8	
c. trickle charge	mA	9.6~16	Continuous charge at 0.03 $\sim$ 0.05C and 0~45 $^{\circ}\mathrm{C}$
Discharging Method a.standard discharge( 0.2C)	h	≧5	Discharge at 0.2C(64mA) to a final voltage of 1.0V at $20\pm5^{\circ}$ C
b.maximum discharging current (0.5C)	min	≧80	Discharge at 0.5C(160mA) to a final voltage of 0.9V at 20±5 $^{\circ}\!$
c.discharge at 0±2°C (0.2C)	h	≧4	Discharge at 0.2C(64mA) to a final voltage of 1.0V.
Overcharge	h	<u>≥</u> 5	At $20\pm5^{\circ}$ , charge at $0.1C(32mA)$ for 48h, rest for $1\sim4h$ , then discharge at $0.2C(64mA)$ to a final voltage of 1.0 V.
Charge Retention	h	≥3.75	After standard charge, store for 28 days at $20\pm5^{\circ}$ C, then discharge at 0.2C(64mA) to a final voltage of 1.0V
Cycle Life	cycle	≧500	IEC61951-2:2003(7.4.1.1)
Storage	%	≧80	IEC61951-2:2003(7.8)
Discharge Temperature	$^{\circ}$	-20~+45	
Dimension a. Diameter	mm	25.25(-0.4)	
b. Height	mm	8.80(-0.6)	
Weight (approx.)	g	13.0	

When the battery open-circuit voltage is below 1.25V before first time application or after long time storage, the battery shall be charged at 0.1C(32mA) for16h or at 0.2C(64mA) for 8h, and rested for 1~4h, then discharged at 0.2C(64mA) to a final voltage of 1.0V. Recycle for 2~3 times, then charge the battery to restore capacity for using.