



## Nickel-Metal Hydride Rechargeable Batteries H40BC

### 1 Scope

This specification is applicable to the “Vinnic®” brand Nickel -Metal Hydride rechargeable batteries for type H40BC

Chung Pak model : H40BC

IEC model : KB116/055(KBL12/6)

### 2 Technical Parameters

Items	Units	Parameters	Conditions and others
Nominal Voltage	V	1.2	Unit cell
Capacity a.nominal capacity	mAh	40	Standard charge/discharge
b.typical capacity	mAh	45	Standard charge/discharge
Charging Method a. standard charge	mA	4(0.1C)	Charge at 20±5°C Charging temperature : 0~+45°C
	h	14~16	
b. accelerated charge	mA	8(0.2C)	Charge at 20±5°C Charging temperature : 10~+45°C
	h	8	
c. trickle charge	mA	1.2~2.0	Continuous charge at 0.03 ~ 0.05C and 0~45°C
Discharging Method a.standard discharge( 0.2C)	h	≥ 5	Discharge at 0.2C(8mA) to a final voltage of 1.0V at 20±5°C
b.maximum discharging current (0.5C)	min	≥ 80	Discharge at 0.5C(20mA) to a final voltage of 0.9V at 20±5°C
c.discharge at 0±2°C (0.2C)	h	≥ 4	Discharge at 0.2C(8mA) to a final voltage of 1.0V.
Overcharge	h	≥ 5	At 20±5°C,charge at 0.1C(4mA) for 48h, rest for 1~4h, then discharge at 0.2C(8mA) to a final voltage of 1.0 V.
Charge Retention	h	≥ 3.75	After standard charge, store for 28 days at 20±5°C, then discharge at 0.2C(8mA) 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	°C	-20~+45	
Dimension	a. Diameter	mm	11.6(-0.3)
	b. Height	mm	5.5(-0.6)
Weight (approx.)	g	1.8	

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(4mA) for16h or at 0.2C(8mA) for 8h, and rested for 1~4h, then discharged at 0.2C(8mA) to a final voltage of 1.0V. Recycle for 2~3 times, then charge the battery to restore capacity for using.