fullwat®
professional solutions

NH800AAAJF • Nickel-Metal Hydride Cylindrical cell

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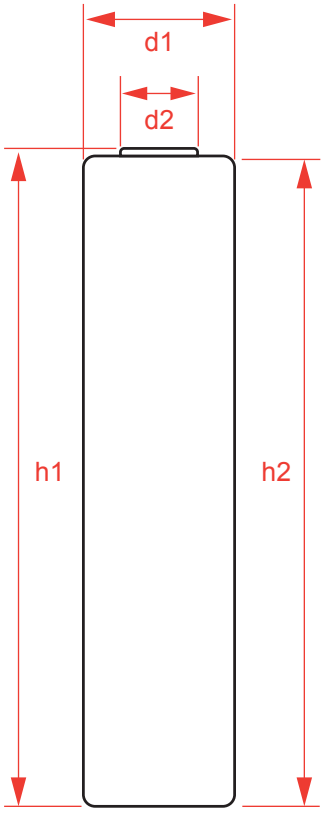
1. Introduction

This specification governs the perfomance of the following FULLWAT Nickel-Metal Hydride Cylindrical cell (NH800AAAJF) and its stack-up batteries.

2. Data of stack up batteries

All data involves and weight to stack-up battery are equal to the value of unit cell time the number of unit cell which consisted in the stack batteries.

3. Dimensions

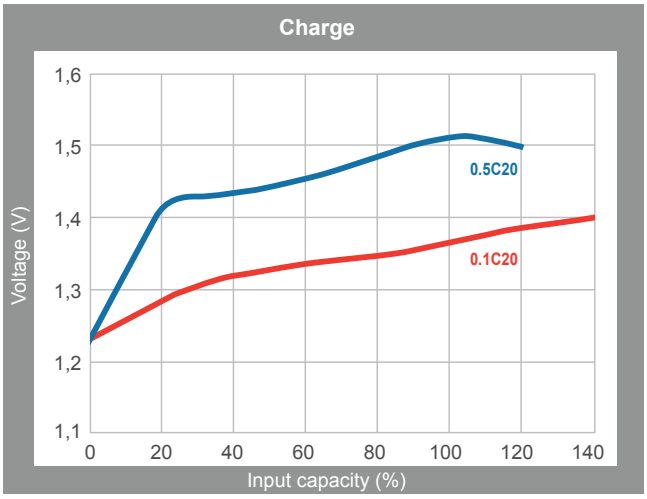


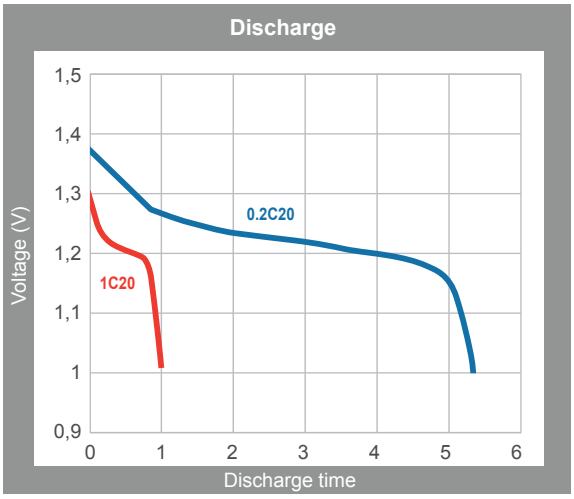
unidades: mm

d1 Ø10	**d2** Ø5,1	**h1** 43,5	**h2** 43

4. Ratings and configurations

4.1	Nominal capacity			800mAh
4.2	Nominal voltage			1.2V
4.3	Charge current		Pulse	<40mAh
			Standard	80mAh
			Medium	240mAh
			Quick	800mAh
4.4	Charge time		Pulse	No limit
			Standard	14~ 16hrs
			Medium	4~5 hrs
			Quick	1.2hrs
4.5	Temperature	Charge	Standard	0~50°C
			Medium	10~50°C
			Quick	10~50°C
		Discharge		-30~60°C
		Storage		-30~65°C
4.6	Impedance (mohmios) (after charge)		Medium	34
			Max.	40
4.7	Weight			12.7gr





5. Perfomance

Unless otherwise stated, tests should be done within one month of delivery under the following conditions:

Ambient temperature (T1):	20 ± 5ºC
Relative humidity	65 ± 20%
Charge conditions	80mA (C/10) x 14 hours
Discharge conditions	160mA (C/5) to 1.0V/cell

Test	Unit	Value	Conditions	Remarks
Capacity	mAh	≥800	Standard charge discharge	Up to 3 cycles are allowed
Open circuit voltage (VOC)	V/cell	≥1,25	Within 1 hour after standard charge	
Internal impedance	mohms/cell	Medium<34 Maximum<40	Upon fully charge (1KHz)	
High rate discharge (1C)	Minute	>54	Standard charge, 1 hour rest before discharge by 800 mA (1C) to 1,0 V/cell	Up to 3 cycles are allowed
Overcharge		No leakage nor explosion	80mA (C/10) Charge 28 days	
Charge retention	mAh	>560 (70%)	Standard charge. Storage: 28 days Standard discharge	
Cycle life	Cycle	>500	IEC285 (1993) 4.4.1	
Accelerated cycle life	Cycle	>400	Charge 400 mA (C/2). Discharge 800mA (C) to 1,0V/cell, End-of 80% nominal capacity.	Cycling charging cut-off condition. V=0~5mV/cell and timer cut-off 110% nominal capacity input temp. cuto-off 55ºC
Leakage		No leakage nor explosion	Fully charge at 400mA (C/2)	
Vibration resistance		Change of voltage should be under 0.02V/cell, change of impedance should be under 5 mohms/cell.	Charge the battery at C/10 for 14 hours, then leave for 24 hrs, check battery before/after vibration. Amplitude 1.5mm. Vibration 3000 CPM. Any direction for 60 min.	
Impact resistance		Change of voltage should be under 0.02V/cell, change of 0.02V/cell, change of Las variaciones en la impedance should be under 5 mohms/cell.	Charge the battery at C/10 for 14 hours, then leave for 24 hrs, check battery before/after dropped. Height=50cm. Wooden board (thickness 30mm) Direction not specified 3 times.	

6. External appearance

The cell/battery shall be free from cracks, scars, breakage, rust, discoloration, leakage nor deformation.

7. Warranty

The warranty is specified in our warranties section of *Terms of Sales.* If the product is to be stored for more than three months it is necessary to perform the appropriate maintenance to ensure the good condition of the batteries. Consult our annex to the *Terms of Sales* on the recommended maintenance.

8. Caution

- Reverse charging is not acceptable.
- Charge before use. The cells/batteries are delivered in an uncharged state.
- Do not charge/discharge with more than our specified current.
- Do not short circuit the cell/battery. Permanent damage to the cell/battery may result.
- Do not incinerate or mutilate the cell/battery.
- Do not solder directly to the cell/battery.
- The life expectancy may be reduced if the cell/battery is subjected adverse conditions like: extreme temperature, deep cycling , excessive overcharge/ over-discharge.
- Store the cell/battery uncharged in a cool dry place.Always discharge batteries before bulk storage or shipment.