ARTS ENERGY

ARTS Energy's VRE standard Ni-Cd series are perfectly suited to cycling applications. It is designed for a wide range of applications requiring a high level of robustness.

To meet customers' requirements, ARTS Energy provides custom-designed and standardised battery packs.

For your battery design and system needs, please contact ARTS Energy's engineers.

N APPLICATIONS

- Professional electronics
- Professional lighting equipment
- Military equipment

👍 MAIN BENEFITS

- Excellent cycling performance
- High power
- Superior robustness
- Extreme low temperatures (-40°C)

⚙ TECHNOLOGY

- Sintered positive electrode
- Plastic bonded negative electrode

NI-CD
VRE F
KRH 33/91
1.2V - 8Ah

ELECTRICAL CHARACTERISTICS	
Nominal voltage (V)	1.2
Typical capacity (mAh)*	8800
IEC minimum capacity (mAh)*	8000
IEC designation	KRH 33/91
Impedance at 1000 Hz (mΩ)	< 4

* Charge 16 h at C/10, discharge at C/5.

DIMENSIONS	
Diameter (mm)	32.15 ± 0.10
Height (mm)	88.8 ± 0.4
Top projection (mm)	1.4 ± 0.4
Top flat area diameter (mm)	5.6 ± 0.1
Weight (g)	221

Dimensions are given for bare cells.

CHARGE CONDITIONS	Temp. (°C)	Current
Fast	0 to + 40	2,7A max
Topping (after fast charge)	0 to + 40	Consult ARTS Energy
Trickle (after topping)	0 to + 40	Consult ARTS Energy
Charge below 0°C	-40 to 0	Consult ARTS Energy

End of Fast charge cut-off is requested: -dV or dT°C/dt

DISCHARGE CONDITIONS	Temp. (°C)	Current
	10 to +60	40A max
	-30 to +60	1C max
	-40 to +60	C/2 max

CYCLING CONDITIONS	Cycling	Life duration
	Full cycles (100% DOD)	> 1000 cycles

NI-CD

VRE F
Standard Series

VRE F
Standard Series

🔧 STORAGE

Recommended: + 5°C to + 25°C
Relative humidity: 65 ± 5 %

📊 TYPICAL DIMENSIONS

5.6   1.4

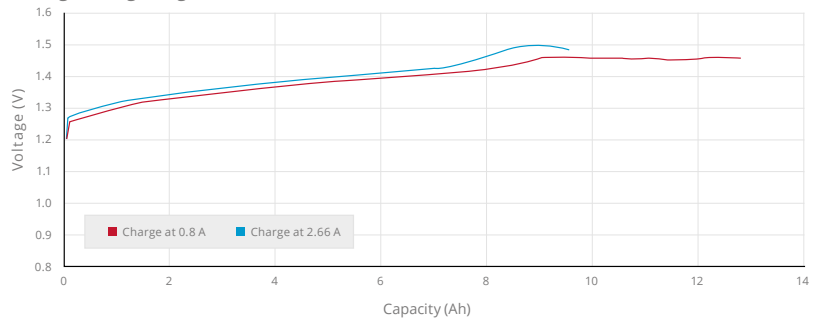88.8

32.15
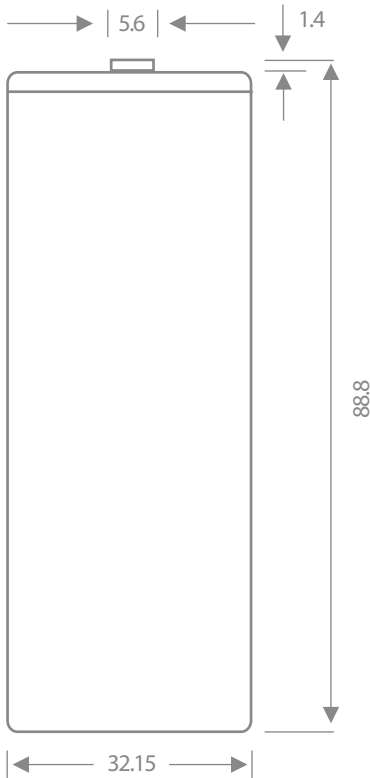
Typical dimensions (mm). Without tube.

The operation of the battery must strictly be in accordance with ARTS Energy technical recommendations, to obtain the performances stated by ARTS Energy.

Data is given for single cells. Please consult ARTS Energy for utilisation of cells outside specification.
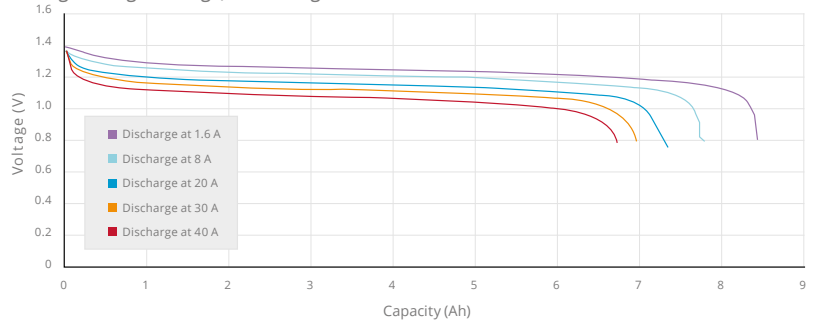
Data in this document is subject to change without notice and become contractual only after written confirmation by ARTS Energy.

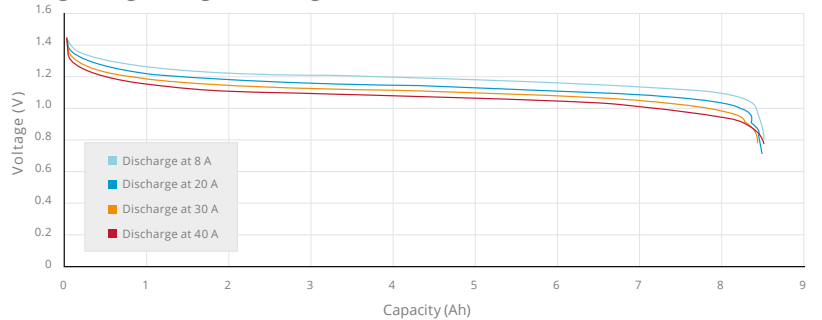For graphs shown, C is the IEC_5 capacity.

Voltage during charge

Voltage (V) vs Capacity (Ah)

- Charge at 0.8 A
- Charge at 2.66 A

Voltage during discharge, after charge at C/10

Voltage (V) vs Capacity (Ah)

- Discharge at 1.6 A
- Discharge at 8 A
- Discharge at 20 A
- Discharge at 30 A
- Discharge at 40 A

Voltage during discharge, after charge at C/3

Voltage (V) vs Capacity (Ah)

- Discharge at 8 A
- Discharge at 20 A
- Discharge at 30 A
- Discharge at 40 A