

# Standard Series Nickel-Cadmium VRE Cs

To expand its Ni-Cd offer, Saft has launched new High Energy Ni-Cd Cs cells, the VRE Cs.

Developed to fit Professional electronics and home appliances, these cells are also perfectly designed for all equipment where an extended cycle life and a longer operating time are required.

To meet customers' requirements, Saft provides custom-designed and standardized battery packs.

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

## Applications

- Power tools
- Radio controls
- Lawn and gardening equipment
- Home appliances
- Payment terminals

## Main advantages

- Cycling application
- Fast charge
- Extended cycle life
- Good charge retention

## Technology

- Sintered positive electrode
- Plastic bonded negative electrode

## Temperature range in discharge

- 20°C to + 60°C

## Storage

Recommended: + 5°C to + 25°C

Relative humidity: 65 ± 5 %



## Electrical characteristics

Nominal voltage [V]	1.2
Typical capacity [mAh]*	1400
IEC minimum capacity [mAh]*	1300
IEC designation	KRHR 23/43
Impedance at 1000 Hz [m Ω]	6

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

## Dimensions

Diameter [mm]	22.0 + 0.15/- 0.05
Height [mm]	41.9 ± 0.3
Top projection [mm]	0.8 ± 0.2
Top flat area diameter [mm]	9.0 min
Weight [g]	43

Dimensions are given for bare cells.

## Charge conditions

Rate	Time (h)	Temp. [°C]	Charge current (mA)
Fast*	~ 1	+ 10 to + 45	up to 1300
Standard	16	0 to + 50	130
Trickle**			30 to 65

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

\*\* Trickle charge follows fast charge.

## Maximum discharge current

Continuous [A] at + 20°C	13
Peak [A] at + 20°C*	108

\* Peak duration: 0.3 second - final discharge voltage 0.65 volt/cell.

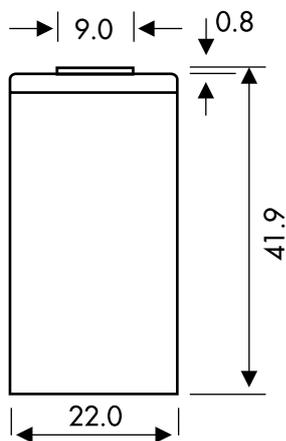


**saft**

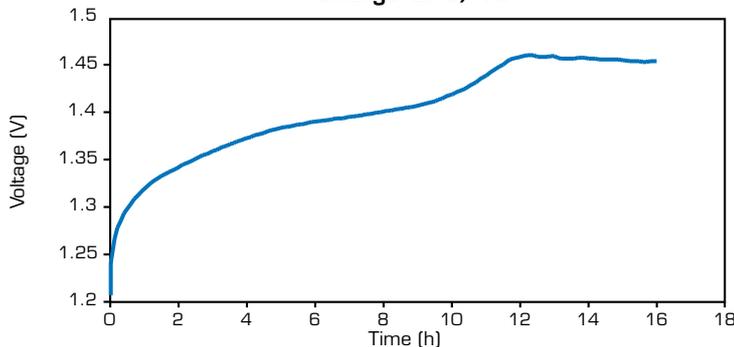
### Typical performances

For graphs shown, C is the IEC<sub>5</sub> capacity.

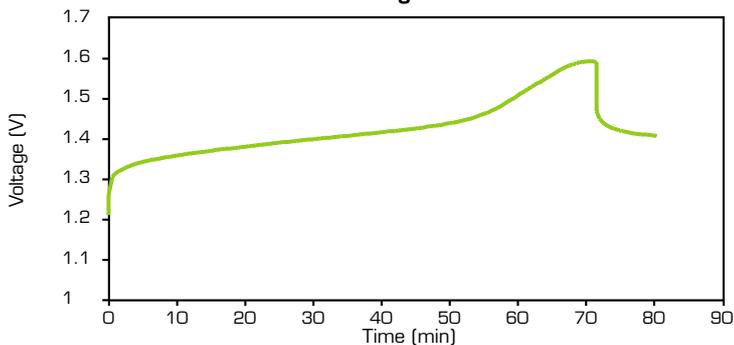
Dimensions are in mm.



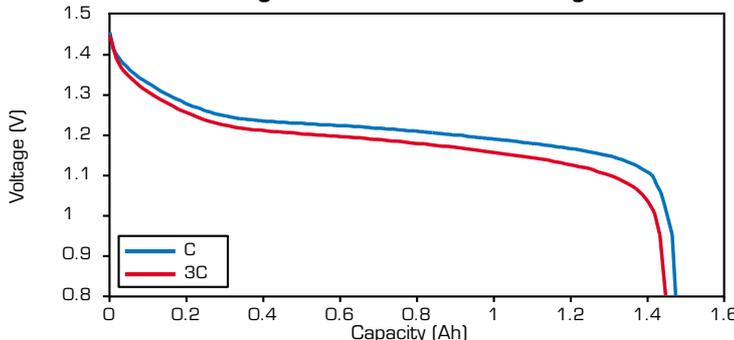
Charge at C/10



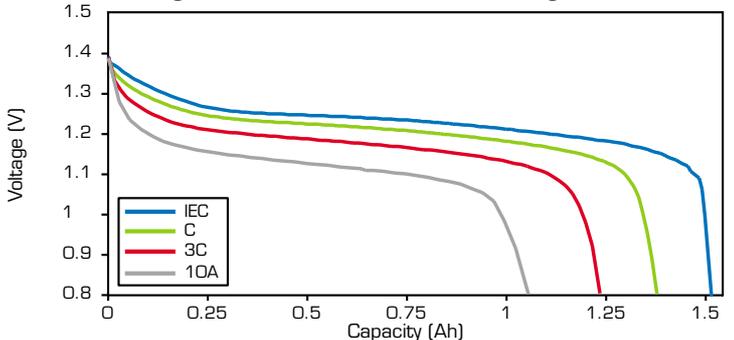
Charge at C



Discharge at C and 3C after charge at C



Discharge at different rates after charge 16h at C/10



Data are given for single cells. Please consult Saft for any use of this cell in other conditions than those given in this data sheet.

### Rechargeable Battery Systems

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