

# HIGH ENERGY SERIES

Nickel-Cadmium

## VE 4/5 A

With the VE series, Saft upgrades its standard technology : it boosts capacity by 10 to 15% without increasing volume, while at the same time maintaining performance levels.

The VE 4/5 A cell offers significant capacity Gains for the same volume, high energy for applications requiring a higher operating time and good storage retention.

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

- Professional electronics
- Cordless communication systems
- Home appliances
- Private mobile radio

### Main advantages

- High energy series giving a higher operating time
- Good storage retention
- Quick and fast charge
- Cycling application

### 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%

Data are given for single cell.

Please consult Saft for utilization of cell outside this specification.

### Electrical characteristics

Nominal voltage (V)	1.2
IEC typical capacity (mAh) at C/5	1050
IEC minimum capacity (mAh) at C/5	1000
IEC designation	KRH 17/43
Impedance at 1000 Hz (mΩ)	21

### Dimensions

Diameter (mm)	16.7 +/- 0.2
Height (mm)	42.3 +/- 0.2
Top projection (mm)	0.7 +/- 0.2
Top flat area diameter (mm)	5.6
Weight (g)	27

Dimensions are given for bare cells

### Charge conditions

Rate	Time (h)	Temp. (°C)	Charge current (mA)
Fast	~1	+10 to +40	1200
Quick	3 to 4	+5 to +50	300
Standard	16	0 to +50	100
Trickle*		-20 to +50	40

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

\* Trickle charge follows quick or fast charge

The maximum battery temperature recommended during charge is +45°C

### Maximum discharge current

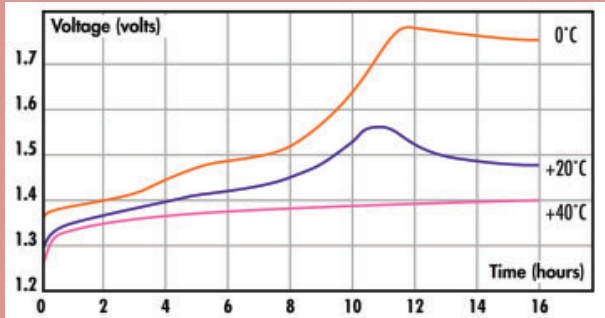
Continuous (A) at +20°C	5.0
-------------------------	-----



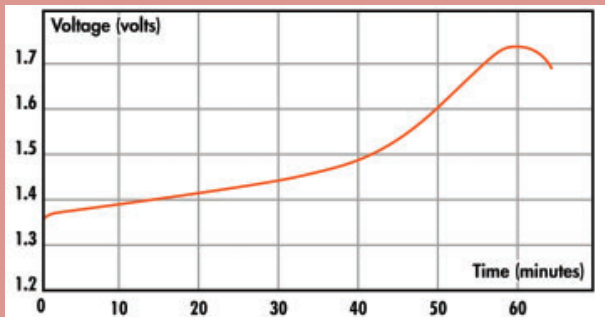
# HIGH ENERGY SERIES

Nickel-Cadmium  
VE 4/5 A

## Voltage in normal charge (current 0.1 C)

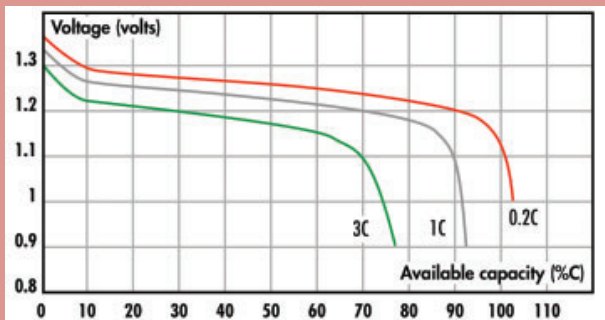


## Voltage in fast charge (current 1.2 C at temperature +20°C)

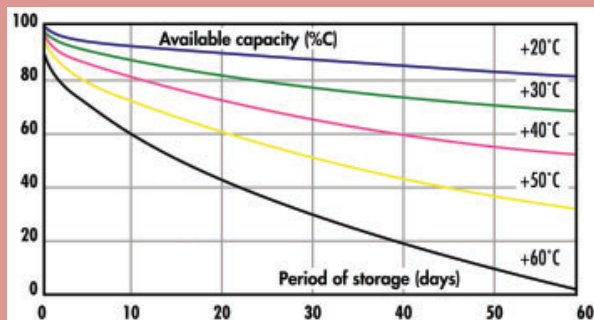


## Voltage in discharge at +20°C

(after charge 0.1 C x 16 hours at +20°C)

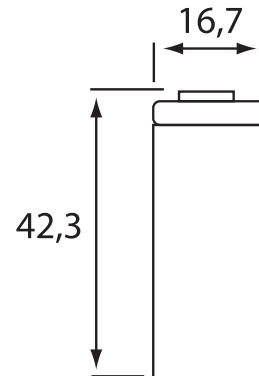


## Charge retention (between +20°C and +60°C)



## Typical performances

For graphs shown, C is the IEC<sub>5</sub> capacity.  
Dimensions are in mm.



### SAFT

#### Rechargeable Battery systems

12, rue Sadi Carnot  
93170 Bagnole - France  
Phone: +33 (0)1 49 93 19 18  
Fax: +33 (0)1 49 93 19 68  
Email: rbs.info@saft.alcatel.fr  
DOC. N° 11071-2-0602  
Published by the Communication Department

[www.saftbatteries.com](http://www.saftbatteries.com)

Data in this document are subject to change without notice and become contractual only after written confirmation by Saft.

