

HIGH ENERGY SERIES

Nickel-Cadmium

VSE 4/5 A

Saft has upgraded its Ni-Cd product offer and has launched the VSE 4/5 A cell to meet the needs of increasingly light and compact applications.

Foam electrode technology has especially been developed for the VSE series. The result is an "ultra-high energy" battery, fully recommended for the whole range of portable electronics applications.

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
- Radio control models
- Home appliances
- Mobile communication systems

Main advantages

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

Technology

- Foam 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	1300
IEC minimum capacity (mAh) at C/5	1200
IEC designation	17/43
Impedance at 1000 Hz (mΩ)	17

Dimensions

Diameter (mm)	16.6 ± 0.1
Height (mm)	42 ± 0.3
Top projection (mm)	0.7 ± 0.2
Top flat area diameter (mm)	5.6
Weight (g)	28

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	400
Standard	16	0 to +50	120
Trickle *		-20 to +50	50

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

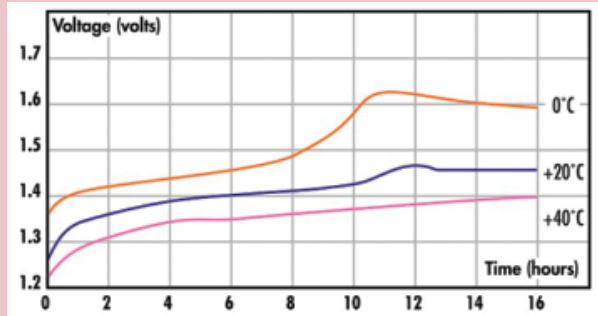
Maximum discharge current

Continuous (A) at +20°C	3.6
-------------------------	-----

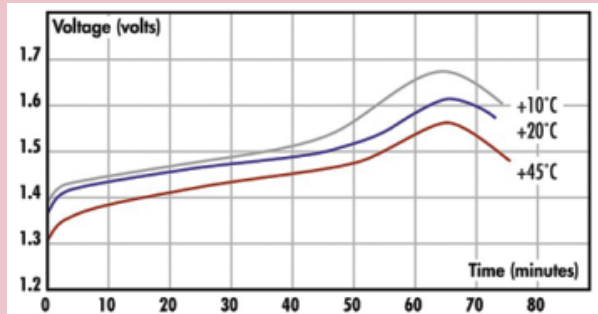
HIGH ENERGY SERIES

Nickel-Cadmium
VSE 4/5 A

Voltage in slow charge (current 0.1 C)

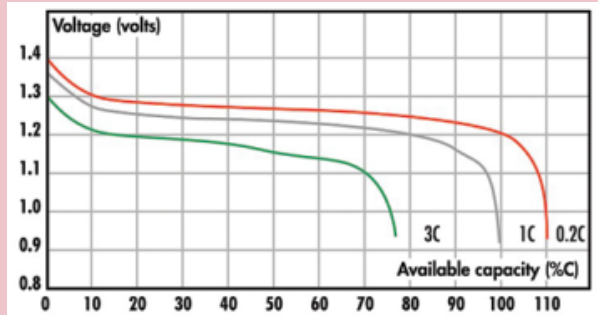


Voltage in fast charge (current C)



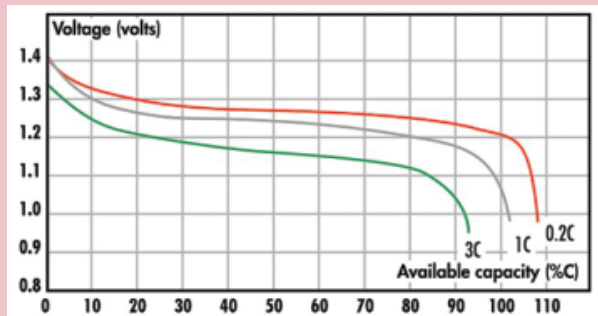
Voltage in discharge at +20°C

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



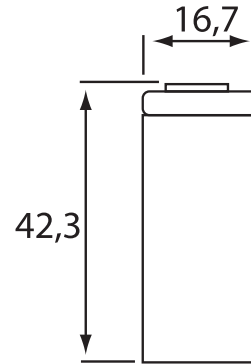
Voltage in discharge at +20°C

(after fast charge 0.1 C x 1.2 hours at +20°C)



Typical performances

For graphs shown, C is the IEC₅ capacity



SAFT

Rechargeable Battery systems

12, rue Sadi Carnot
 93170 Bagnolet - 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° 11055-2-0102
 Published by the Communication Department

www.saftbatteries.com

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

