

STANDARD SERIES

Nickel-Cadmium

VR 7 FL

Engineered for cycling applications, Saft's VR 7 FL cell ideally suits for a wide range of applications.

In addition, the VR 7 FL is well-adapted for applications requiring a permanent charge at temperatures of up to +35°C. Moreover, it offers a high level of reliability and an excellent cost/performance ratio.

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
- Memory back-up systems
- Portable military equipment (portable radio communication...)

Main advantages

- Cycling application
- Quick and fast charge

Technology

- Sintered positive electrode
- Sintered negative electrode

Temperature range in discharge

-40°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	7700
IEC minimum capacity (mAh) at C/5	7000
IEC designation	35/92
Impedance at 1000 Hz (mΩ)	2.7

Dimensions

Diameter (mm)	32.2 ± 0.2
Height (mm)	89.1
Top projection (mm)	1.5 ± 0.3
Top flat area diameter (mm)	7
Weight (g)	228

Dimensions are given for bare cells

Charge conditions

Rate	Time (h)	Temp. (°C)	Charge current (mA)
Fast	~1	+10 to +40	3500
Quick	3 to 4	+5 to +50	1400
Standard	16	0 to +50	700
Trickle *		-20 to +50	175

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	35
Peak (A) at +20°C*	147

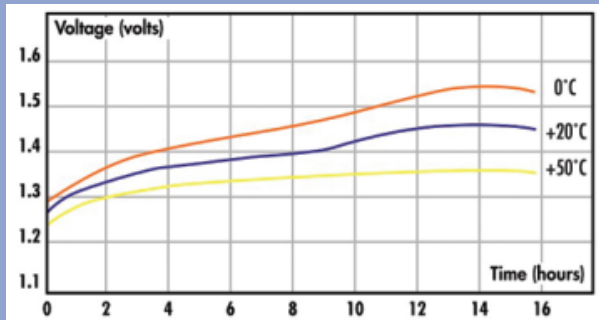
* Peak duration: 0.3 second - final discharge voltage 0.65 volt/cell



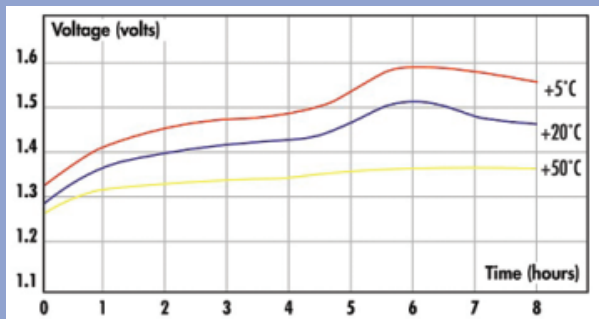
STANDARD SERIES

Nickel-Cadmium
VR 7 FL

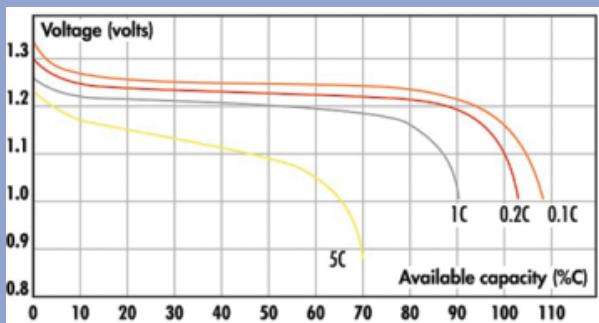
Voltage in normal charge (current 0.1 C)



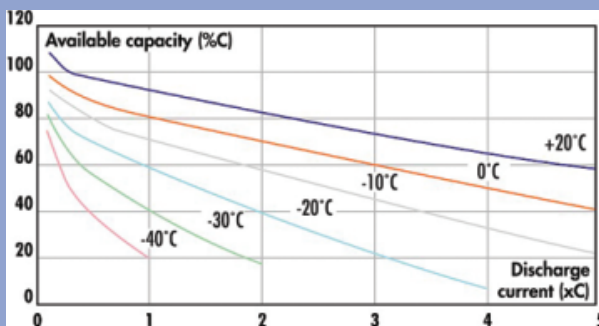
Voltage in fast charge (current 0.2 C)



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

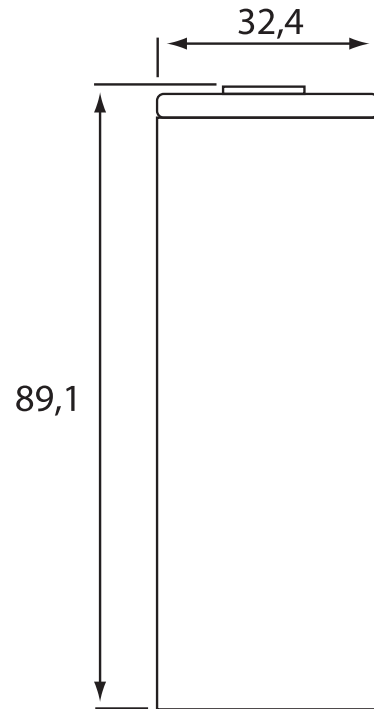


Available capacity (after charge 0.1 C x 16 hours at +20°C)



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° 11052-2-0102
 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.

