# **High Temperature Series Nickel-Cadmium** VT D

This cell is specially designed to accept a permanent overcharge in high temperature environment, such as emergency lighting equipment (minimum of 4 years up to + 40°C as required by the IEC international standard).

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

- Emergency lighting units
- Security devices
- Memory back-up systems

### Main advantages

- Good charge efficiency at high temperature
- High energy retention
- Longer lifetime at high temperature

### Technology

- Sintered positive electrode
- Plastic bonded negative electrode

### Temperature range in discharge

- 20°C to + 70°C

### Storage

Recommended: + 5°C to + 25°C Relative humidity:  $65 \pm 5 \%$ 



#### **Electrical characteristics** Nominal voltage (V) 1.2 4300 Typical capacity (mAh)\* 4000 IEC minimum capacity (mAh)\* KRMT 33/62 IEC designation Impedance at 1000 Hz (m $\Omega$ ) 6

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

Dimensions	
Diameter (mm)	32.15 ± 0.10
Height (mm)	59.9 ± 0.4
Top projection (mm)	3.1 ± 0.4
Top flat area diameter (mm)	5.6
Weight (g)	120

Dimensions are given for bare cells.

Charge conditions			
Rate	Time (h)	Temp. (°C)	Charge current (mA)
Standard	16	+ 15 to + 40	400
Permanent		+ 15 to + 40	200
Trickle*			100 to 200

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

*	Irick	le c	harge	toll	lows	full	ch

Maximum discharge current	
Continuous (A) at + 20°C	14
Peak (A) at + 20°C*	150

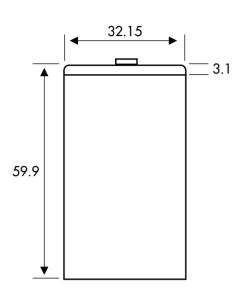
\* Peak duration: 0.3 second - final discharge voltage 0.65 volt/cell.

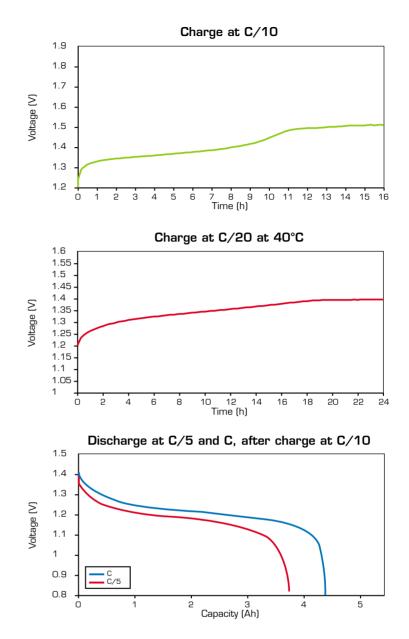


#### Typical performances

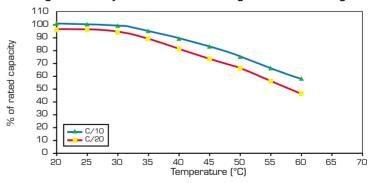
For graphs shown, C is the  $\mbox{IEC}_5$  capacity.

Dimensions are in mm.





#### Charge efficiency after different charge rates, discharge at C/2



Data are given for single cells. Please consult Saft for utilization of cell outside this datasheet.

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

## Saft Rechargeable Battery Systems

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