

# High Temperature Series

## Nickel-Cadmium

### VT Cs 1500



The VT Cs 1500 is designed to accept a permanent charge in high temperature environments such as security lighting installations.

The VT Cs series offers capacities from 1.35 Ah to 1.75 Ah to fit the needs for energy, required by security and lighting devices.

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
- Professional lighting
- Memory back-up systems
- Security devices

#### Main advantages

- Good charge efficiency at high temperatures
- Permanent charge
- Good storage retention

#### 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 ± 5 %

#### Electrical characteristics

Nominal voltage (V)	1.2
Typical capacity (mAh)*	1650
IEC minimum capacity (mAh)*	1500
IEC designation	KRMT 23/43
Impedance at 1000 Hz (m Ω)	<7

\* 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)	47

Dimensions are given for bare cells.

#### Charge conditions

Rate	Time (h)	Temp. (°C)	Charge current (mA)
Standard	16	+ 15 to + 40	150
Permanent		+ 15 to + 40	75
Trickle*			37 to 50

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

\* Trickle charge follows full charge.

#### Maximum discharge current

Continuous (A) at + 20°C	5.2
Peak (A) at + 20°C*	40

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

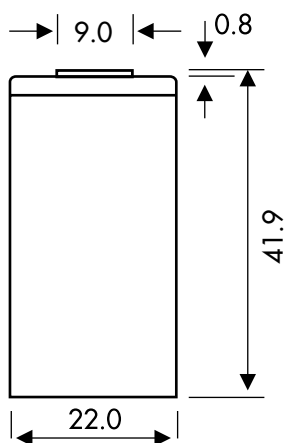


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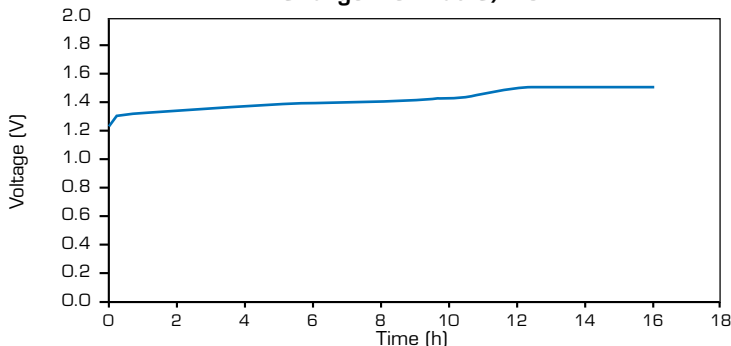
### Typical performances

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

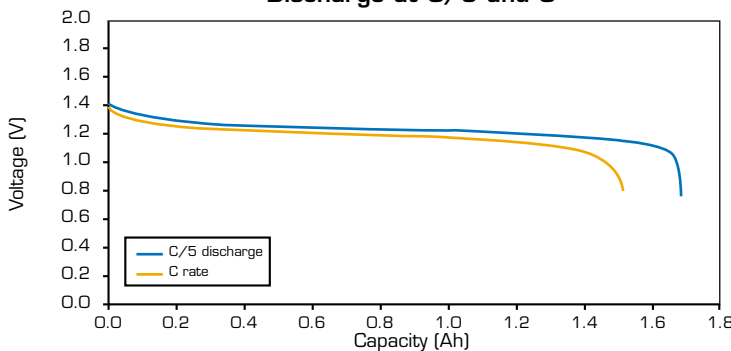
Dimensions are in mm.



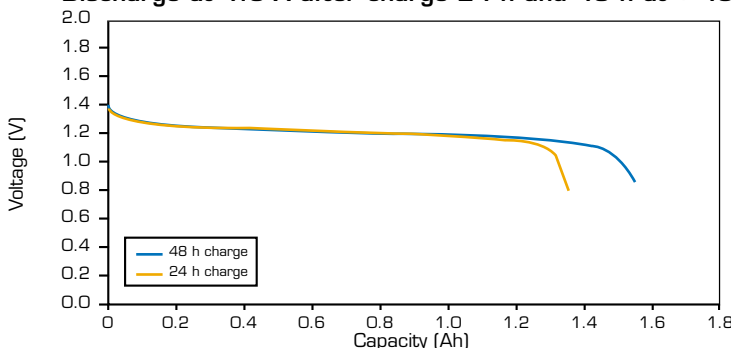
### Charge 16 h at C/10



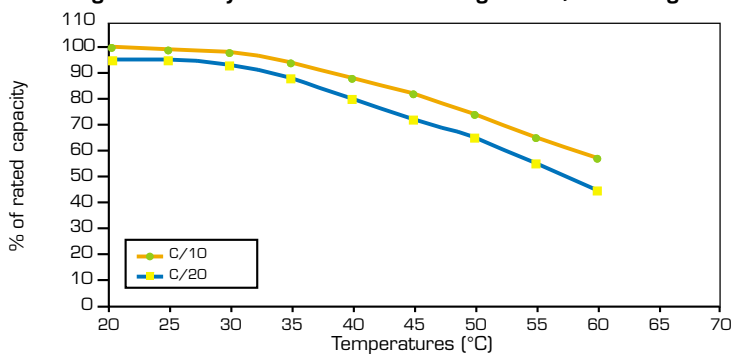
### Discharge at C/5 and C



### Discharge at 1.5 A after charge 24 h and 48 h at + 40°C



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



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.

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