

High Temperature Series

Nickel-Cadmium

VT D 70



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 + 55°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 ± 5 %

Electrical characteristics

Nominal voltage (V)	1.2
Typical capacity (mAh)*	4500
IEC minimum capacity (mAh)*	4000
IEC designation	KRMT 33/62
Impedance at 1000 Hz (m Ω)	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)	128

Dimensions are given for bare cells.

Charge conditions

Rate	Time (h)	Temp. (°C)	Charge current (mA)
Standard	16	+ 15 to + 55	400
Permanent		+ 15 to + 55	200
Trickle*			100 to 200

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	14
Peak (A) at + 20°C*	150

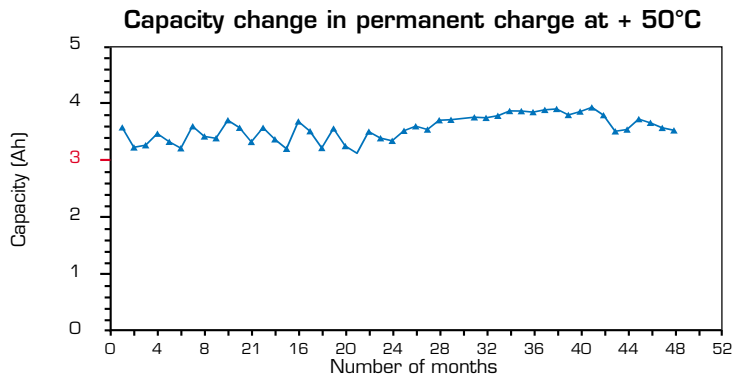
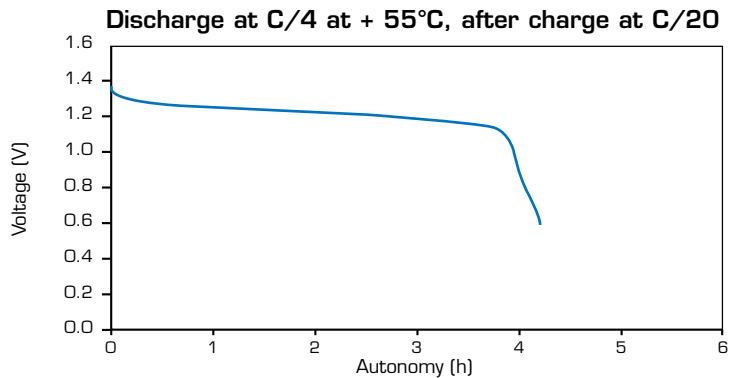
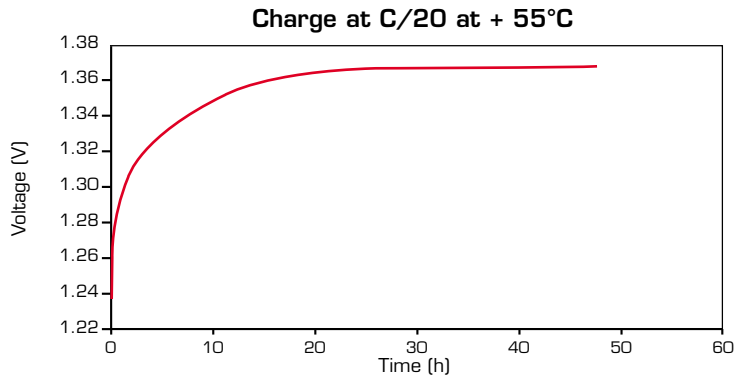
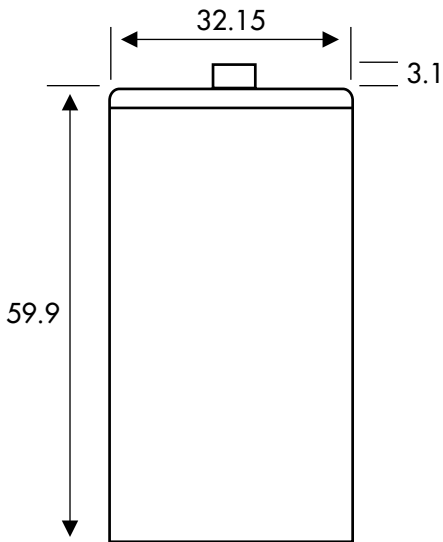
* Peak duration: 0.3 second - final discharge voltage 0.65 volt/cell.



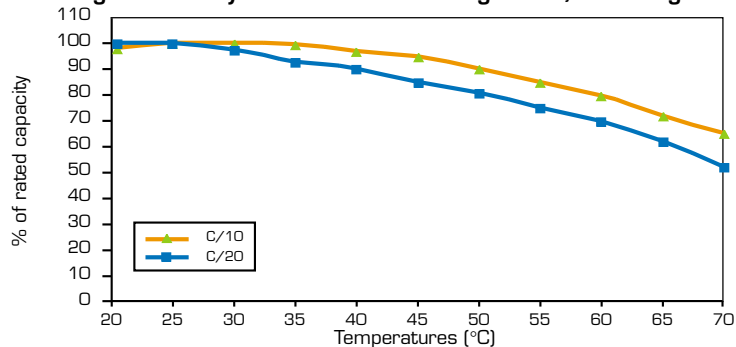
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Typical performances

For graphs shown, C is the IEC₅ capacity.
Dimensions are in mm.



Charge efficiency after different charge rate, 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.

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