

# High Energy Series

## Nickel-Cadmium

### VE C

With the VE series, Saft upgrades its standard technology : it boosts capacity by 10 to 15 % without increasing volume, while at the same time maintaining performance levels.

The VE C cell offers significant capacity gains for the same volume, high energy for applications requiring a higher operating time and good storage retention.

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
- Communication appliances
- Medical equipment
- Lighting equipment

#### Main advantages

- High energy series giving a higher operating time
- Good storage retention
- Fast charge
- Cycling application

#### 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 %



#### Electrical characteristics

Nominal voltage (V)	1.2
Typical capacity (mAh)*	2400
IEC minimum capacity (mAh)*	2200
IEC designation	KRHR 27/50
Impedance at 1000 Hz (m Ω)	5

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

#### Dimensions

Diameter (mm)	25.15 + 0.2/- 0.15
Height (mm)	49.1 ± 0.4
Top projection (mm)	0.8 ± 0.2
Top flat area diameter (mm)	12.0 ± 0.1
Weight (g)	75

Dimensions are given for bare cells.

#### Charge conditions

Rate	Time (h)	Temp. (°C)	Charge current (mA)
Fast*	~1	+ 10 to + 40	2200
Standard	16	0 to + 50	220
Trickle**			55 to 110

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

\*\* Trickle charge follows fast charge.

#### Maximum discharge current

Continuous (A) at + 20°C	15
Peak (A) at + 20°C*	130

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

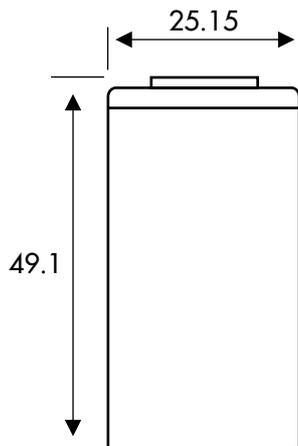


**saft**

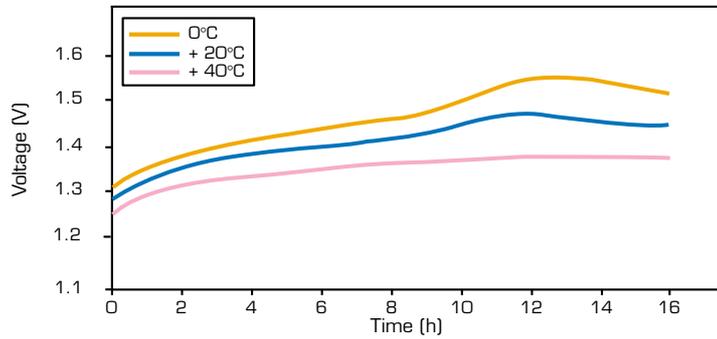
### Typical performances

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

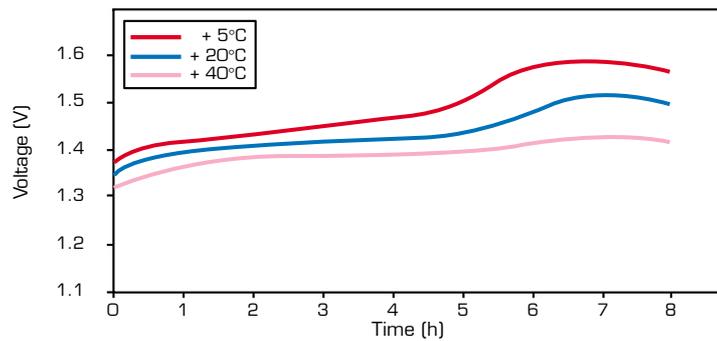
Dimensions are in mm.



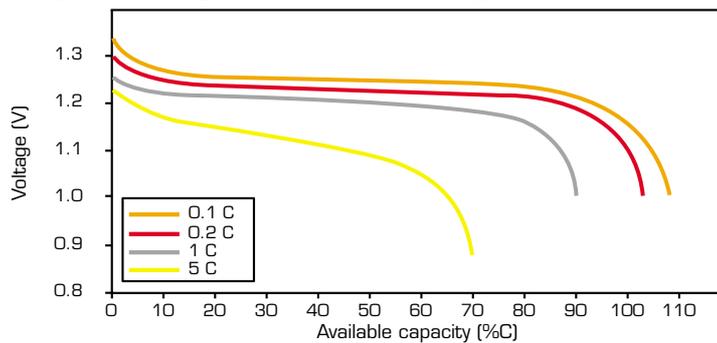
### Voltage in normal charge (current 0.1 C)



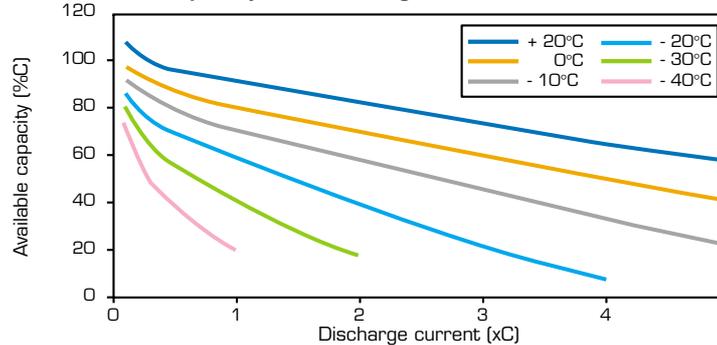
### Voltage in fast charge (current 0.2 C)



### 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)



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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