

# Standard Series Nickel-Cadmium VRE 1/2 D

Engineered for cycling applications Saft's VRE 1/2 D cell ideally suits for a wide range of applications.

In addition, the VRE 1/2 D is well-adapted for applications requiring a permanent charge (C/20) at temperatures of up to + 35°C.

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
- Cordless communication systems
- Home appliances

## Main advantages

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

## Technology

- Sintered positive electrode
- Plastic bonded negative electrode

## Temperature range in discharge

- 20°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)*	2550
IEC minimum capacity (mAh)*	2400
IEC designation	KRM 33/36
Impedance at 1000 Hz (m Ω)	10

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

## Dimensions

Diameter (mm)	32.15 ± 0.10
Height (mm)	36.2 ± 0.4
Top projection (mm)	1.4 ± 0.4
Top flat area diameter (mm)	5.6 ± 0.1
Weight (g)	80

Dimensions are given for bare cells.

## Charge conditions

Rate	Time (h)	Temp. (°C)	Charge current (mA)
Quick*	2 - 3	+ 5 to + 45	up to 800
Standard	16	0 to + 50	240
Trickle**			60 to 120

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

\*\* Trickle charge follows quick charge.

## Maximum discharge current

Continuous (A) at + 20°C	24
Peak (A) at + 20°C*	75

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

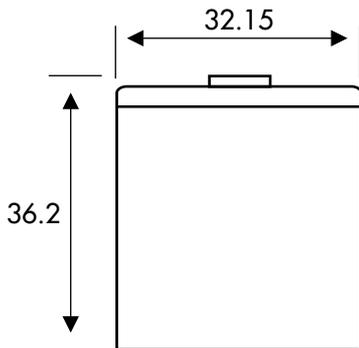


**saft**

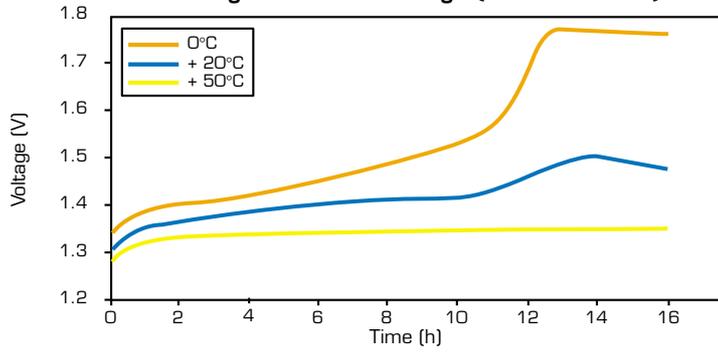
### Typical performances

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

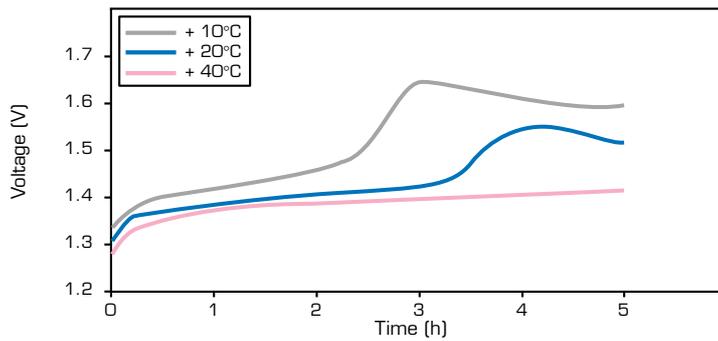
Dimensions are in mm.



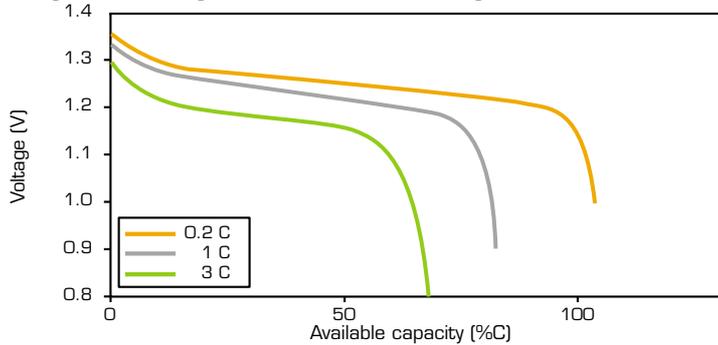
### Voltage in normal charge (current 0.1 C)



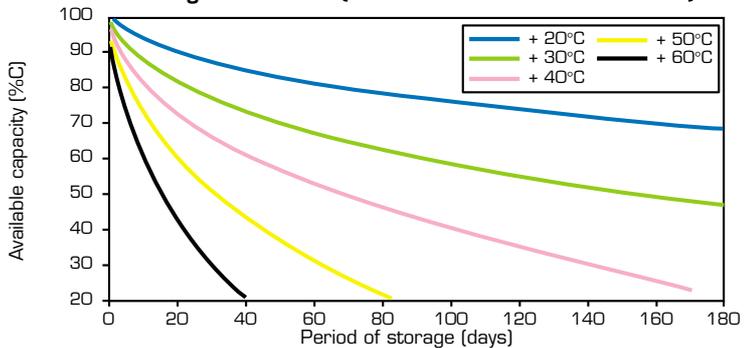
### Voltage in fast charge (current 0.3 C)



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



### Charge retention (between + 20°C and + 60°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.

## Saft Rechargeable Battery Systems

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