

# Standard Series

## Nickel-Cadmium

### VRE D 5500

Engineered for cycling applications Saft's VRE D 5500 cell ideally suits for a wide range of portable applications.

In addition, it 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

- Electric bicycles, scooters and wheelchairs
- Professional appliances
- Professional lighting
- Lawn and gardening tools
- Vacuum cleaners

#### Main advantages

- Super high capacity
- Fast charge
- Good storage ability
- Excellent cycling performance

#### Technology

- Sintered positive electrode
- Plastic bonded 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)*     | 5500       |
| IEC minimum capacity (mAh)* | 5000       |
| IEC designation             | KRHR 33/62 |
| Impedance at 1000 Hz (m Ω)  | <4         |

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

#### Dimensions

|                             |              |
|-----------------------------|--------------|
| Diameter (mm)               | 32.15 ± 0.10 |
| Height (mm)                 | 58.2 ± 0.4   |
| Top projection (mm)         | 1.4 ± 0.4    |
| Top flat area diameter (mm) | 5.6 ± 0.1    |
| Weight (g)                  | 150          |

Dimensions are given for bare cells.

#### Charge conditions

| Rate      | Time (h) | Temp. (°C)   | Charge current (mA) |
|-----------|----------|--------------|---------------------|
| Fast*     | ~ 1      | + 10 to + 40 | up to 5000          |
| Standard  | 16       | + 5 to + 50  | 500                 |
| Trickle** |          |              | 150                 |

\* 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 | 50  |
| Peak (A) at + 20°C*      | 150 |

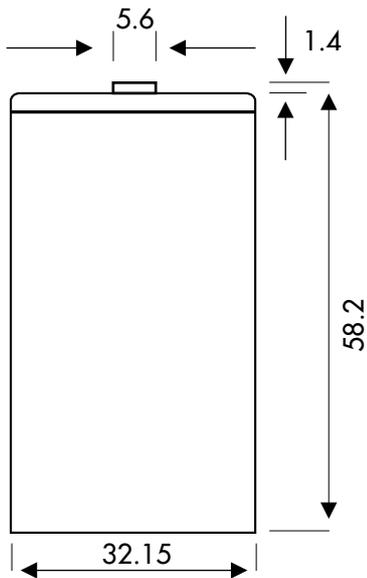
\* Peak duration: 0.3 second - final discharge voltage 0.6 volt./cell.



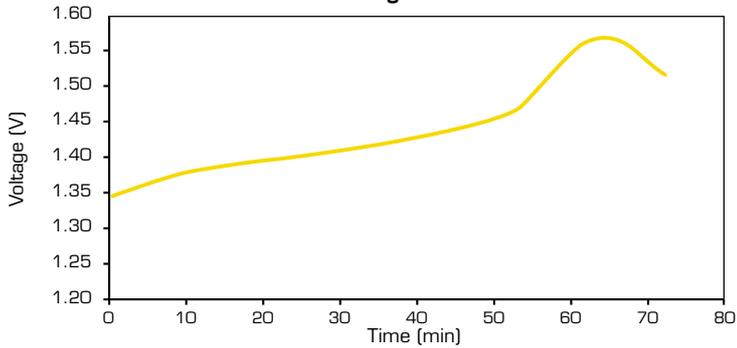
**saft**

**Typical performances**

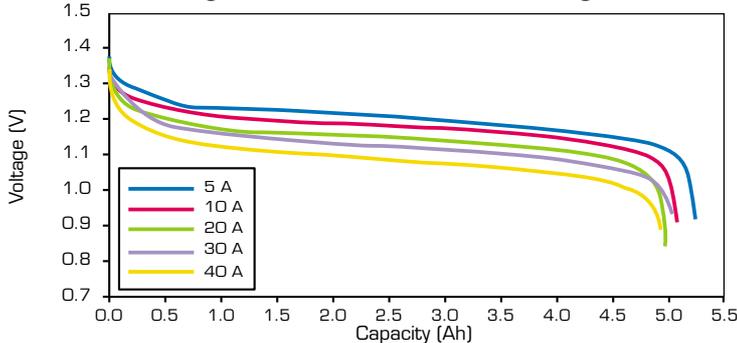
For graphs shown, C is the IEC<sub>5</sub> capacity.  
Dimensions are in mm.



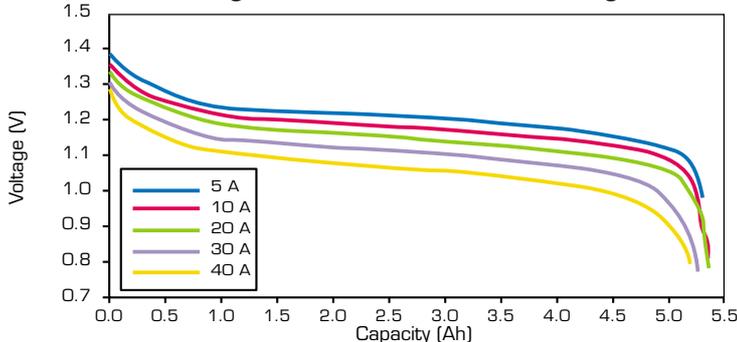
**Charge at 5 A**



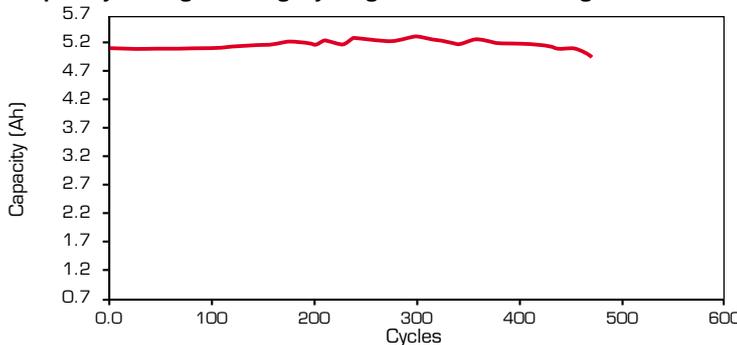
**Discharge at different rates after charge at C/10**



**Discharge at different rates after charge at C**



**Capacity change during cycling at 10 A discharge, after full charge**



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**

12, rue Sadi Carnot  
93170 Bagnole - France  
Tel.: +33 1 49 93 19 18  
Fax: +33 1 49 93 19 68  
Email: rbs.info@saftbatteries.com

[www.saftbatteries.com](http://www.saftbatteries.com)



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