

# LS 17500

## Primary Li-SOCl<sub>2</sub> cell

High energy density 3.6 V A-size bobbin cell

Saft's LS 17500 cell is ideally suited for long-term applications (typically from 5 to 20+ years), featuring low base currents and periodic pulses.

### Benefits

- High capacity and high energy (1139 Wh/l and 589 Wh/kg)
- High voltage response, stable during most of the lifetime of the application
- Wide operating temperature range (-60°C / +85°C)
- Low self-discharge, compatible with a long operating life (less than 1% per year of storage, at +20°C, after 1 year)
- Superior resistance to corrosion
- Low magnetic signature

### Key features

- Bobbin construction
- Well controlled passivation
- Hermetic construction with glass-to-metal seal
- Stainless steel can
- Non-flammable electrolyte
- RoHS and REACH compliance
- Manufactured in France, China, UK

### Designed to meet all major quality, safety and environment standards

- Safety: UL 1642, IEC 60086-4
- IEC 60079-11 part 10.5, (T4 temperature rating at +60°C)
- Transport: UN 3090 and UN 3091
- Quality: ISO 9001, Saft Excellence System, continuous evaluation program

### Typical Applications

- Utility Metering
- Internet of Things
- Tracking systems
- Alarms and security
- Connected sensors
- Medical devices



### Electrical characteristics<sup>1</sup>

|  |              |
|--|--------------|
| Nominal capacity (under 3 mA, +20°C, 2.0 V cut-off) <sup>3</sup> | 3.6 Ah       |
| Open circuit voltage (at +20°C)                                  | 3.67 V       |
| Nominal voltage (at 0.3 mA, +20°C)                               | 3.6 V        |
| Nominal energy   | 12,96 Wh     |
| Pulse capability <sup>4</sup>                                    | Up to 250 mA |
| Maximum recommended continuous current                           | 100 mA       |
| For battery sizing, consult Saft                                 |              |

### Operating conditions

|   |                                |
|---|--------------------------------|
| Operating temperature range <sup>5</sup>            | -60°C / +85°C (-76°C / +185°F) |
| Storage temperatures (max recommended) <sup>6</sup> | +30°C (+86°F)                  |

### Physical characteristics<sup>2</sup>

|                  |                    |
|------------------|--------------------|
| Diameter (max)   | 17.16 mm (0.67 in) |
| Height (max)     | 50.77 mm (1.99 in) |
| Typical weight   | 22 g (0.77 oz)     |
| Li metal content | approx. 0.9 g      |

### Termination suffix

|                           |              |
|---------------------------|--------------|
| CN, CNR                   | Radial tabs  |
| 2 PF, 3 PF, 3 PF RP, 4 PF | Radial pins  |
| CNA                       | Axial leads  |
| FL                        | Flying leads |

Other configurations upon request

<sup>1</sup>Typical values relative to cells stored up to one year at +30°C max.

<sup>2</sup>Sleeved cell.

<sup>3</sup>Dependent upon current drain, temperature, cut-off and cell orientation.

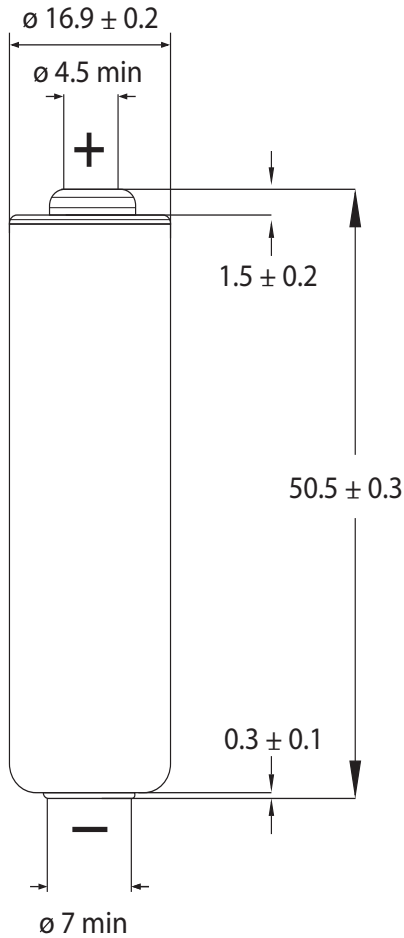
<sup>4</sup>Under 250 mA / 0.1 second pulses, drained every 2 minutes at +20°C from undischarged cells during 24 h, with 10 µA base current, yield voltage readings above 3.0 V after initial stabilisation. The readings may vary according to the pulse characteristics, the temperature, and the cell's previous history. Fitting the cell with a capacitor may be recommended in severe conditions or for high pulse currents. Consult Saft.

<sup>5</sup>Operation above ambient temperature may lead to reduced capacity and lower voltage readings. Consult Saft.

<sup>6</sup>For more severe conditions, consult Saft.

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Dimensions in mm

#### Storage

- The storage area should be clean, cool (preferably not exceeding +30°C), dry and ventilated.

#### Warning

- Fire, explosion and severe burn hazard.
- Do not recharge, short circuit, crush, disassemble, heat above 100°C (212°F), incinerate, or expose contents to water.
- Do not solder directly to the cell (use tabbed cell versions instead).
- Do not mix new and used cells or cells from different origins.
- Mind the polarities of the cell.

