

LS 33600

Primary Li-SOCl₂ cell

High energy density 3.6 V D-size bobbin cell

Saft's LS 33600 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 (1185 Wh/l and 680 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 rate, compatible with 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
- Made in France

Designed to meet all major quality, safety and environment standards

- Safety: UL 1642, IEC 60086-4
- ATEX: IEC 60079-11 part 10.5 (T4 rating at 40°C)
- Transport: UN 3090 and UN 3091
- Quality: ISO 9001, Saft Excellence System, continuous program

Typical Applications

- Utility Metering
- Internet of Things
- Alarms and security
- Medical devices
- Tracking systems
- Professional electronics



Electrical characteristics¹

Nominal capacity (under 5 mA, +20°C, 2.0 V cut-off) ³	17 Ah
Open circuit voltage (at +20°C)	3.67 V
Nominal voltage (under 0.7 mA, +20°C)	3.6 V
Nominal energy	61.2 Wh
Pulse capability ⁴	Up to 400 mA
Maximum recommended continuous current	250 mA

For battery sizing, consult Saft

Operating conditions

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

Physical characteristics²

Diameter (max)	33.3 mm (1.31 in)
Height (max)	61.3 mm (2.41 in)
Typical weight	90 g (3.2 oz)
Li metal content	approx. 4.5 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

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

²Sleeved cell.

³Dependent upon current drain, temperature, cut-off and cell orientation.

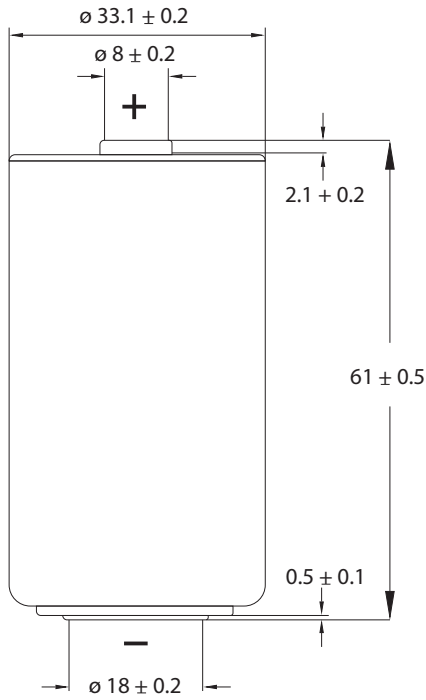
⁴Under 400 mA / 0.1 second pulses, drained every 2 minutes at +20°C from undischarged cells during 24 h, with 10 µA base current, yield voltage readings above 3.0 V after initial stabilisation. The readings may vary according to the pulse characteristics, the temperature, and the cell's previous history. Fitting the cell with a capacitor may be recommended in severe conditions or for high pulse currents. Consult Saft.

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

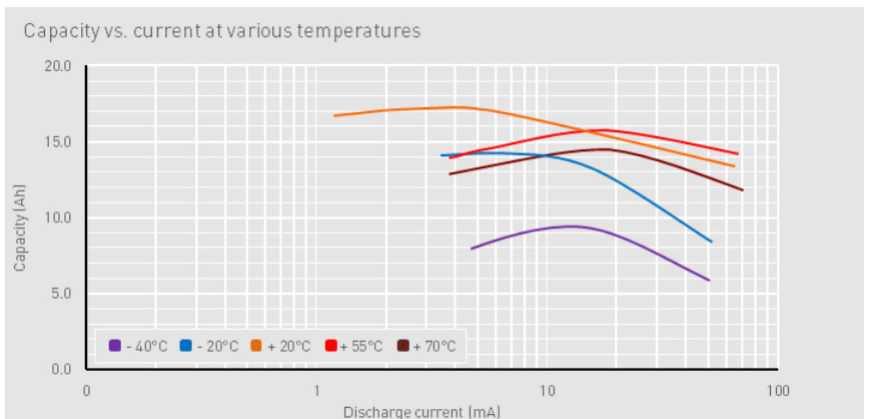
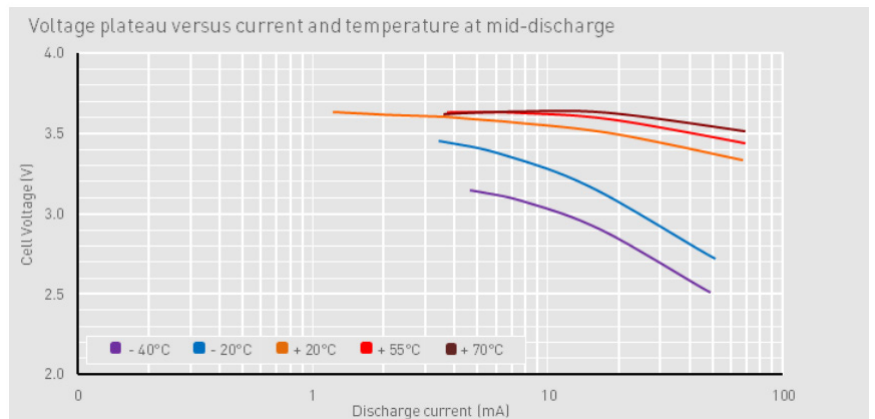
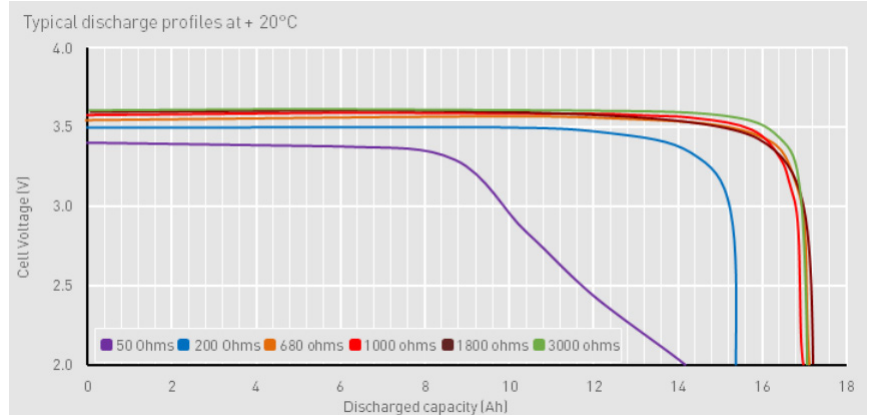
⁶For more severe conditions, consult Saft.

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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 remove the cells from their original packing before use.
- Do not store the cells in bulk to avoid accidental short circuiting.
- Do not mix new and used cells or cells from different origins.
- Mind the polarities of the cell.

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Saft, a subsidiary of TotalEnergies
S.A.S. au capital de 26 724 876 €
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Document N° 31007-2-0923

Edition: September 2023

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