LSP 33600-20F

Hybrid Primary Li-$SOCl_2$ battery

3.6 V D-size bobbin cell fitted with a 20F LIC

Saft's LSP 33600-20F battery is ideally suited for long life applications (typically from 5 to 10 years), featuring low base currents and periodic high current pulses up to 1.5 A.

Benefits

- High pulse current capability
- High voltage response, stable even after long dormant periods
- Low self-discharge compatible with long operating life (less than 1.5% capacity loss per year after 1 year of stabilization at + 20 °C)
- Wide operating temperature range (-20°C to +70°C)

Key features

- Battery made of Saft's LS 33600 D-size bobbin Li-$SOCl_2$ cell fitted with a 20 F LIC (Lithium Ion Capacitor) in parallel connection for pulse support
- Restricted for transport (class 9)
- Made in EU

Designed to meet all major quality, safety and environment standards

- Safety: UL 1642 (File MH12609) and IEC 60086-4 for the LS 33600 cell
- Transport: UN 3090, 3091 & 3499 for components (*assembly under testing*)
- Quality: ISO 9001, Saft World Class continuous program
- Environment: ISO 14001, RoHS and REACH

Typical applications

- Smart Metering
- Internet of Things
- Tracking systems
- Environment monitoring

Electrical characteristics		
(Typical values related to batteries stored up to one year at + 30 °C max)		
Typical capacity (at 5 mA, +20 °C, 2.0 V cut-off) [1]		17 Ah
Open circuit voltage		3.67 V
Nominal voltage (at 0.7 mA, + 20 °C)		3.6 V
Nominal energy		61.2 Wh
Typical pulse capability [2]		At 20°C pulse 1 A / 3 s

Operating conditions		
Operating temperature range [3]		-20 °C / +70 °C
Storage temperatures	Recommended [4]	+30 °C max.

Physical characteristics		
Length (max)	Design example. For other configurations, please consult Saft	44.0 mm
Width (max)		33.5 mm
Height (max)		62.5 mm
Terminals		Flying leads with optional connectors
Typical battery weight		92 g
Li metal content		approx. 4.5 g

References	
Saft part No.	60090U

[1] Dependent upon current drain, temperature, cut-off and battery orientation.

[2] Typical pulse capability to 2.8V at + 20 °C from fresh battery. The voltage readings may vary according to:
- the pulse characteristics such as intensity, duration and frequency
- the environment's temperature
- the battery's previous history.

Consult Saft for any other pulse conditions.

[3] Operation above or under ambient temperature may lead to reduced capacity and lower voltage readings. Consult Saft.

[4] For more severe conditions, consult Saft.

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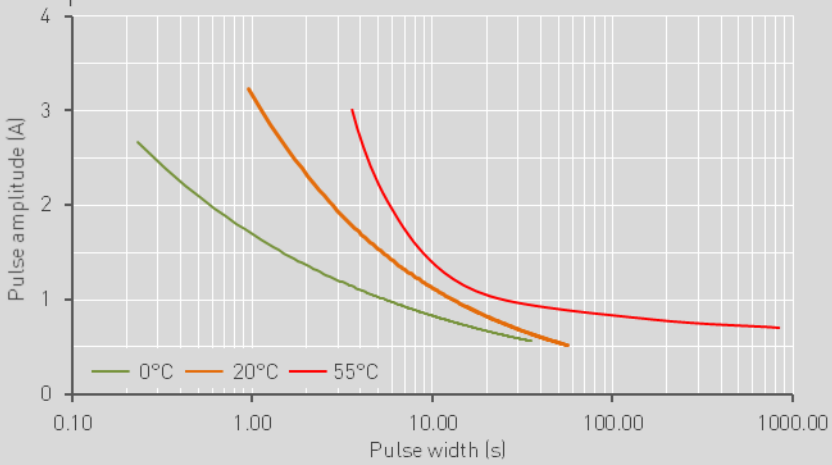
Storage

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

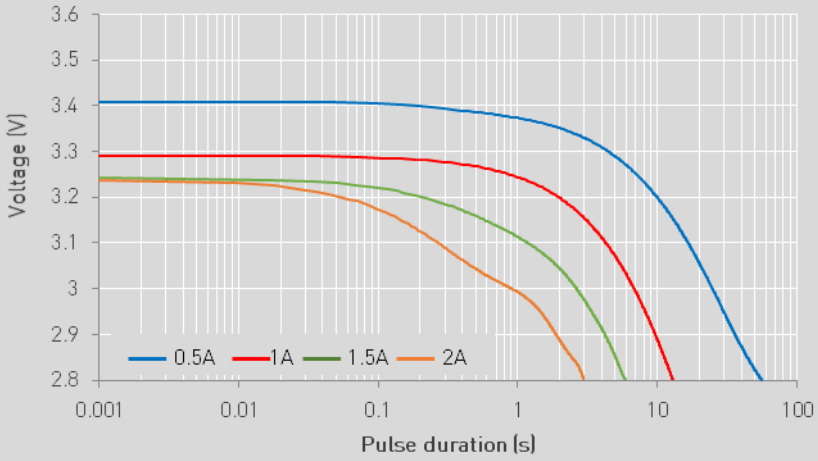
Warning

- Fire, explosion and 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)

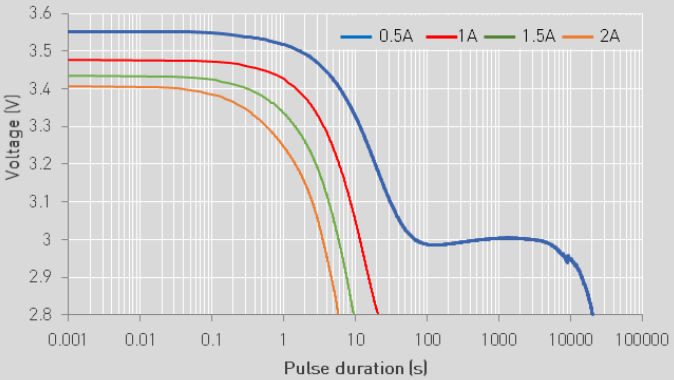
Maximum pulse width from 3,6 V to 2,8 V at various temperatures



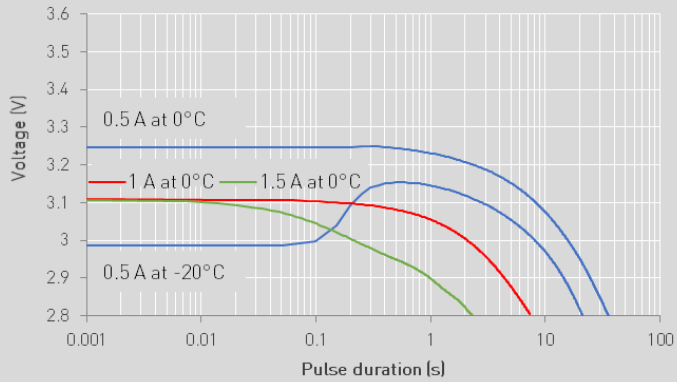
Voltage during a pulse at 20°C



Voltage during a pulse at 55°C



Voltage during a pulse at low temperatures



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