# LSP 33600-20F

## Hybrid Primary Li-SOCl<sub>2</sub> 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 Dsize bobbin Li-SOCl₂ 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 ra	-20 °C / +70 °C			
Storage temperatures	Recomm	nended <sup>[4]</sup>		+30 °C max.
Physical characteristics				
Length (max)				44.0 mm

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.

- <sup>[2]</sup> 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.

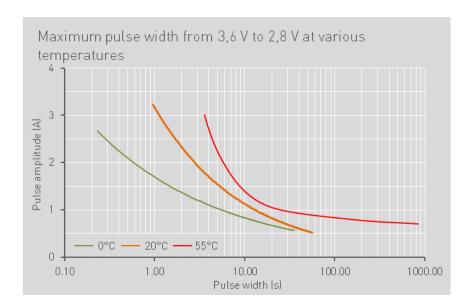


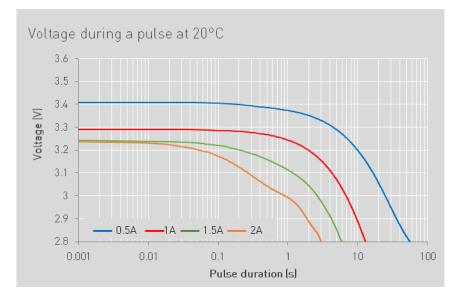
#### Storage

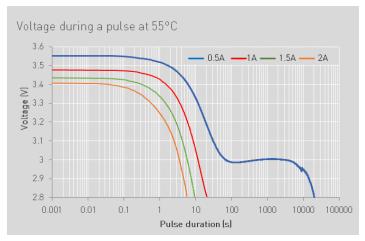
■ The storage area should be clean, cool (preferably not exceeding + 30 °C), dry and ventilated

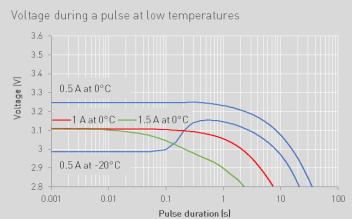
#### Warning

- 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)











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