# **Primary lithium battery** LS 33600

## 3.6 V Primary lithium-thionyl chloride (Li-SOCl<sub>2</sub>) High energy D-size bobbin cell

### **Benefits**

- High voltage response, stable during most of the lifetime of the application
- Wide operating temperature range (-60°C/85°C)
- Easy integration in compact system
- Low self-discharge rate (less than 1 % after 1 year of storage at + 20°C)

### **Key features**

- Stainless steel container
- Hermetic glass-to-metal sealing
- Built-in safety vent
- Finish with or without flat positive end
- Non-flammable electrolyte
- Compliant with IEC 60086-4 safety standard and IEC 60079-11 intrinsic safety standard
- Underwriters Laboratories (UL) **Component Recognition** (File Number MH 12609)
- Restricted for transport (Class 9)

### **Main applications**

- Utility metering
- Automatic meter readers
- Buoys
- Measuring equipment
- Industrial applications
- Professional electronics
- Marine equipment

### **Optional upon request**

• Low magnetic version

### **Cell size references**

#### **Electrical characteristics**

(typical values relative to cells stored for one year or less at + 30°C max.)

Nominal capacity

(at 5 mA + 20°C 2.0 V cut-off. The capacity restored by the cell varies	
according to current drain, temperature and cut-off)	

Open circuit voltage	(at + 20°C)	3.67 V
Nominal voltage	(at 0.7 mA + 20°C)	3.6 V
Nominal energy		61.2 Wh

Pulse capability: Typically up to 400 mA

(400 mA/0.1 second pulses, drained every 2 mn at + 20°C from undischarged cells with 10 µA base current, yield voltage readings above 3.0 V. 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. Consult Saft)

Maximum recor (to maintain cel. level of maximur Consult Saft)	250 mA	
Storage	(recommended) (for more severe conditions, consult Saft)	+ 30°C (+ 86°F) max
Operating temperature range		- 60°C/+ 85°C
(Operation abov lower voltage re	(- 76°F/+ 185°F)	
Physical cha	racteristics	

Diameter (max)			33.4 mm (1.32 in)
Height (max)			60.2 or 61.6 mm (2.37 in or 2.42 in) depending on finish type
Typical weight			90 g (3.2 oz)
Li metal content			approx. 4.5 g
Available termination	n suffix CN, CNR CNA (AX) FL	radial tabs axial leads flying leads <i>etc.</i>	





D

17.0 Ah

# LS 33600



2.9 2.8 2.7

2.6

2.5

Finished version with protruding positive end cap



# Finished version with flat positive end cap

Dimensions in mm.

### 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).

### Saft

### **Specialty Battery Group**

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### S 3.4 3.3 3.4 3.2 3.0 3.0



10 Current (mA)

1





### Doc. Nº 31007-2-0710

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20°C

1000

40°C

100

Voltage plateau versus Current and Temperature (at mid-discharge)