Primary lithium battery LS 14500Ex

3.6 V Primary lithium-thionyl chloride (Li-SOCl₂) High energy density AA-size bobbin cell

For demanding and potentially explosive atmospheres

Benefits

- Used in potentially explosive atmospheres
- Enhanced capacity
- High voltage response, stable during most of the lifetime of the application
- Wide operating temperature range

(-60°C/+85°C)

 Low self-discharge rate (less than 1% after 1 year of storage at + 20°C)

Key features

- Non-flammable electrolyte
- Compliant with IEC 60079-11 intrinsic safety standard and IEC 60086-4 safety standard
- Stainless steel container and end caps

(low magnetic signature)

- Hermetic glass-to-metal sealing
 Underwriters Laboratories (UL) Component Recognition
- Non-restricted for transport
- Manufactured in UK and China

Main applications

- Gas metering
- Automatic meter reading
- Alarms and security devices
- Miners cap lamps
- Gas detectors
- Air monitoring equipment
- Safety torches
- Gas tanks level monitoring
- Miner equipment

Cell size references

Electrical characteristics

(typical values relative to cells stored for one year or less at +30°C max.)	
Nominal capacity (at 2 mA +20°C 2.0 V cut-off. The capacity restored by the cell varies according to current drain, temperature and cut-off)	2.6 Ah

Open circuit voltage	(at +20°C)	3.67 V
Nominal voltage	(at 0.2 mA +20°C)	3.6 V
Nominal energy		9.36 Wh

Pulse capability: Typically up to 250 mA

[250 mÅ/0.1 second pulses, drained every 2 mn at +20°C from undischarged cells with 10 μ A 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]

	nended continuous current possible, consult Saft)		50 mA
Storage	(recommended) (for more severe conditions,	(recommended) (for more severe conditions, consult Saft)	
Operating temperature range (Operation above ambient T may lead to reduced capacity and lower voltage readings at the beginning of pulses. Consult Saft)		-60°C/+85°C (-76°F/+185°F)	
Physical charac	cteristics		
Diameter (max)			14.55 mm (0.57 in)
Height (max)			50.3 mm (1.98 in)
Typical weight			16.7 g (~ 0.6 oz)
Li metal content			approx. 0.7 g
Available terminati	on suffix CN, CNR 2 PF, 3 PF, 3 PF RP, 4 PF CNA (AX) FL	radial tabs radial pins axial leads flying leads <i>etc</i> .	

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(T4 up to +55°C)	
I short-circuit current (max)	3.7 A
Ri (max)	989 mOhm
Temperature rise (max)	+ 78°C





R6 - AA

LS 14500Ex







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).

Restored Capacity versus Current and Temperature (2.0 V cut-off)



Saft

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