

# Primary lithium batteries

## LS 14500W

3.6V Primary lithium-thionyl chloride (Li-SOCl<sub>2</sub>)  
AA-size bobbin cell

For applications requesting superior voltage response and operating life in widely fluctuating temperature environments up to +95°C.



### Key features

- High and stable operating voltage
- Superior voltage readings after exposure at elevated temperature
- Voltage readings during pulsing moderately affected by T fluctuations
- Less than 1.5% of self-discharge after storage 1 year at +20°C
- Stainless steel container (low magnetic signature)
- Hermetic glass-to-metal sealing
- Non-flammable electrolyte
- Underwriters Laboratories (UL) component recognition
- Compliant with EN 50020 "Atex" standard
- Non-restricted for transport

### Main applications

- Electronic toll collection
- Identification and tracking systems
- Professional electronic

etc...

### Cell size references

UM3 - R6 - AA

### Electrical characteristics

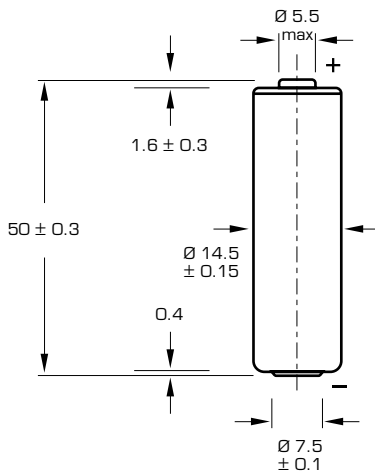
*(typical values for cells stored for one year or less)*

Nominal capacity <i>(at 1 mA +20°C 2V cut off. The capacity restored by the cell varies according to current drain, temperature and cut off).</i>	2.2 Ah
Open circuit voltage (at +20°C)	3.67 V
Nominal voltage (at 0.2 mA +20°C)	3.6 V
<i>Pulse capability: Varies according to pulse characteristics, temperature, cell history and the application's acceptable minimum voltage. Fitting the cell with a capacitor in parallel may be recommended in severe conditions. Consult Saft.</i>	
Continuous current permitting 50% of the nominal capacity to be restored at +20°C with 2V cut off <i>(Higher currents are possible. Consult Saft)</i>	60 mA
Storage <i>(recommended)</i> <i>(for more severe conditions, consult Saft)</i>	+30°C (+86°F) max
Operating temperature range <i>(Operation above ambient may lead to reduced capacity and lower voltage readings at the beginning of pulses. Consult Saft)</i>	-60°C/+95°C (-76°F/+203°F)

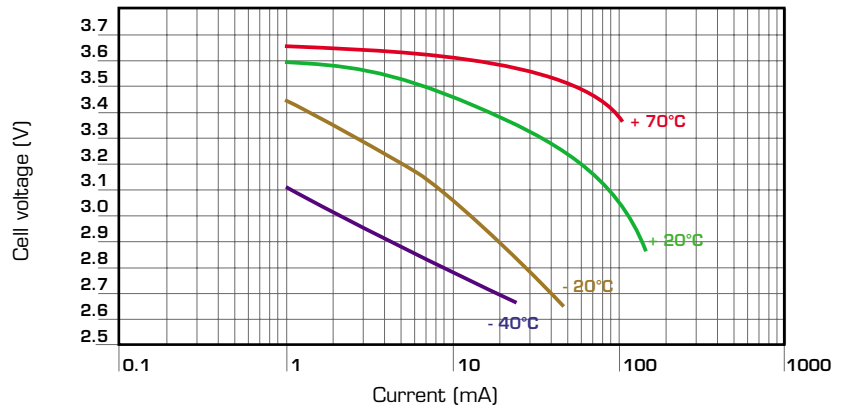
### Physical characteristics

Diameter (max)	14.65 mm (0.58 in)
Height (max)	50.3 mm (1.98 in)
Typical weight	16.2 g (0.5 oz)
Li metal content	approx. 0.6 g
Available termination suffix	
CN, CNR	radial tabs
2PF, 3PF, 3PF RP, 4PF	radial pins
CNA (AX)	axial leads
FL	flying leads etc.

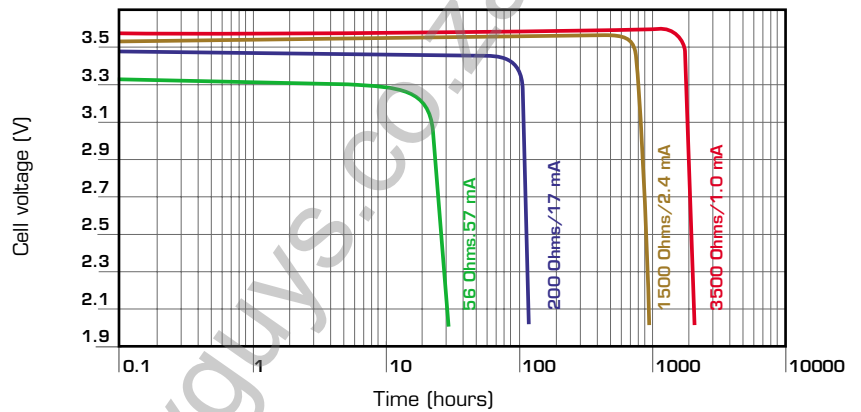
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Dimensions in mm.



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



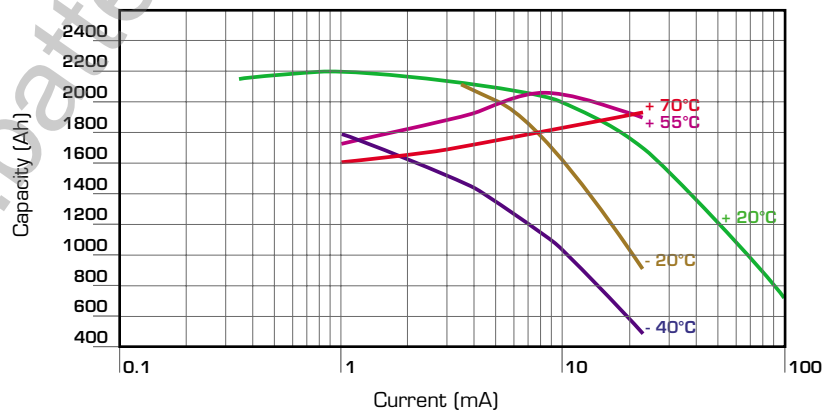
Typical discharge profiles at +20°C

## Storage

- The storage area should preferably be clean, cool (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.



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