

VL 34570 xlr

Rechargeable Li-ion cell

3.65 V high energy Li-ion cell with robust performance and cycle life

Saft's VL 34570 xlr cell is ideally suited for applications requiring high energy, long operating life, under cycling conditions and offers excellent performance in temperature environments from -35°C to $+60^{\circ}\text{C}$.

Benefits

- Excellent operating lifetime in cycling with a very stable internal resistance
- Long shelf life with extremely low capacity loss under storage
- Easy connection and assembly into batteries
- Smaller environmental footprint than other technologies

Key features

- High energy density (364 Wh/l and 151 Wh/kg)
- Cycle life more than 800 cycles at 100% DOD at C/2 discharge and C/2 charge rate
- Nickel steel casing
- Hermetically sealed
- Maintenance free
- No memory effect
- Manufactured in EU

Designed to meet all major quality, safety and environmental standards

- Safety: UL 1642 and IEC 62133:2017
- Transport: UN 3480, UN 3481
- Quality: ISO 9001, ISO 13485
Saft World Class program
- Environment: ISO 14001, RoHS and REACH compliant

Typical applications

- Industrial equipment
- Medical devices
- Tracking
- Oil & Gas applications
- Internet of Things
- Wireless Sensor Networks
- Lighting & signalling



Electrical characteristics

Typical capacity (at C/5 rate, $+25^{\circ}\text{C}$, 2.5V cut-off) ⁽¹⁾	5.4 Ah	
Nominal voltage	3.65 V	
Nominal energy	19.7 Wh	
Recommended maximum discharge current ⁽²⁾	Continuous	11 A (~2C rate)
	Pulse	21 A (~4C rate)

Physical characteristics (sleeved cell)

Diameter	34.20 mm
Height (including terminals)	59.43 mm
Typical weight	~130 g
Volume (including terminals)	0.054 l
IEC cell designation	INR35/60

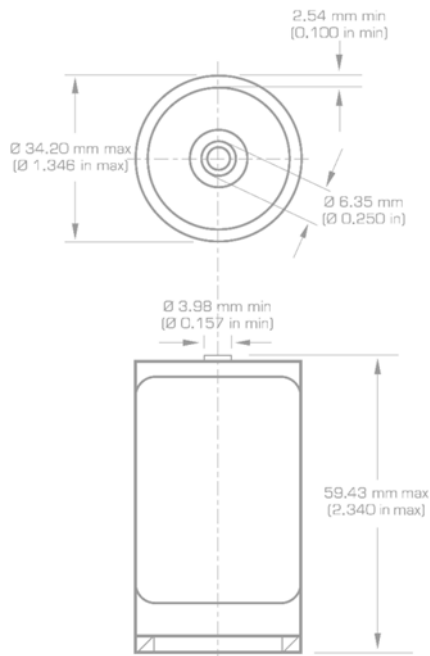
Operating conditions

Typical cut-off voltage	2.5 V	
Charging method	Constant current/Constant voltage	
Charging voltage	4.2 ± 0.05 V	
Maximum continuous charge current ⁽³⁾	5.4 A (~1C rate)	
Operating temperatures ⁽³⁾	Charge	-30°C to $+60^{\circ}\text{C}$
	Discharge	-35°C to $+60^{\circ}\text{C}$
Storage & transportation temperatures ⁽³⁾	Recommended	$+10^{\circ}\text{C}$ to $+30^{\circ}\text{C}$
	Allowable	-40°C to $+60^{\circ}\text{C}$

⁽¹⁾ Can vary depending on temperature and discharge rate

⁽²⁾ Can vary depending on temperatures. Consult Saft

⁽³⁾ For optimised charging below 0°C and above 60°C , consult Saft



Battery assembly

Individual lithium-ion cells need to be mechanically and electrically integrated into battery systems to operate properly. The battery system includes electronic devices for performance, thermal and safety management specific to each application. Please contact Saft for your specific applications requirements.

Battery-level features

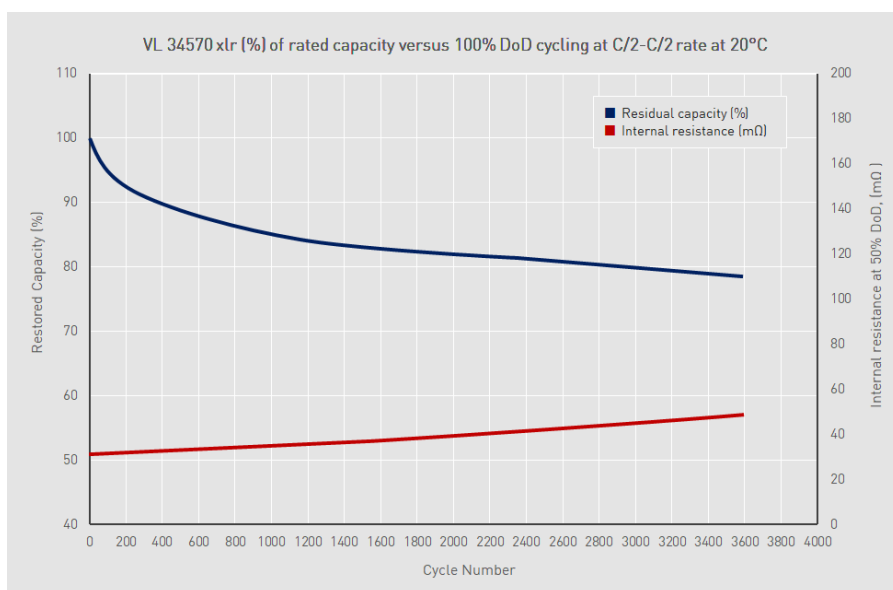
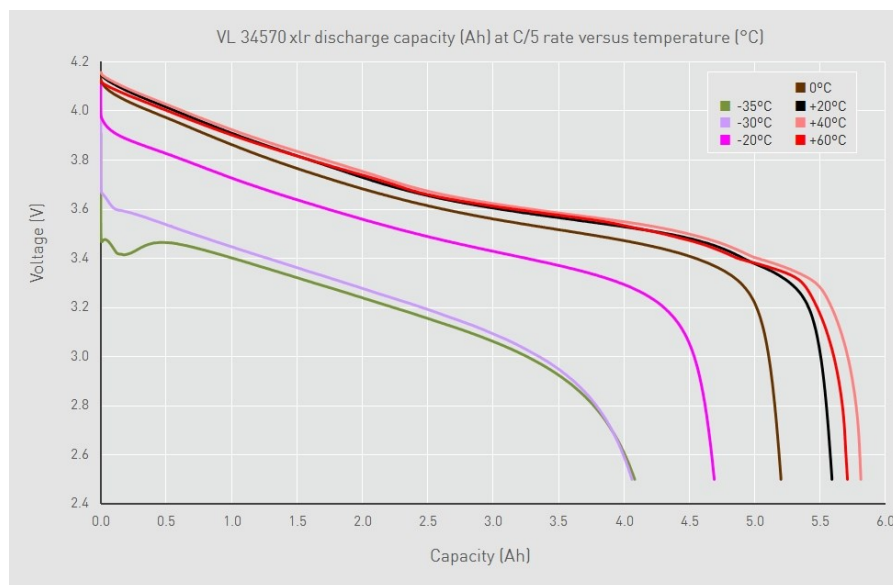
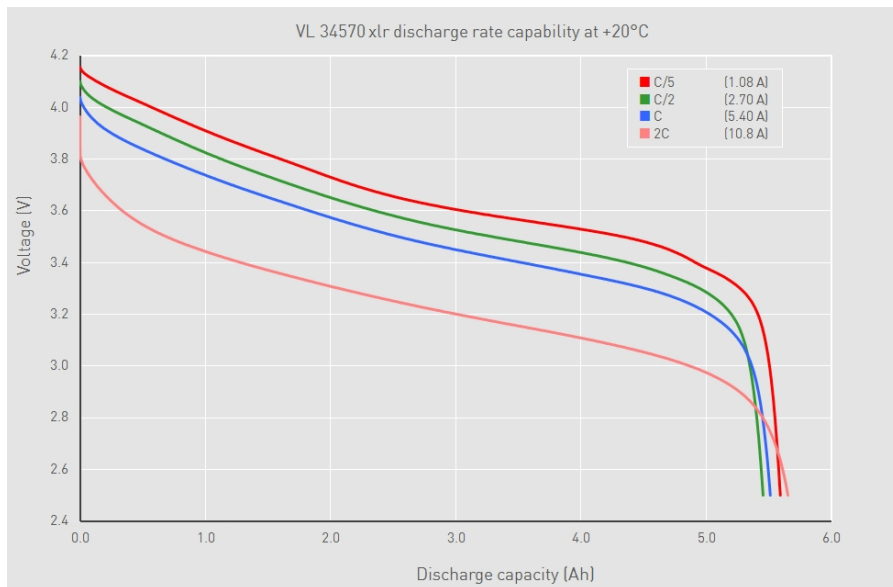
- Saft provides complete battery system designs
- Incorporating several levels of redundant safety features to prevent abuse conditions such as over-charge, over-discharge, and short circuits
- Incorporating electronics for performance and efficiency:
 - charge/floating/discharge management
 - cell balancing
 - temperature monitoring
- Battery protection controller at system level with communication for State-of-Charge and State-of-Health

Storage

- The storage area should be clean, cool (preferably not exceeding $+30^{\circ}\text{C}$), dry and ventilated

Warning

- Do not crush, short-circuit, incinerate, dismantle, immerse in any liquid, heat above $+60^{\circ}\text{C}$
- Observe charging conditions



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