MP 176065 xec

Rechargeable Li-ion prismatic cell

Saft's MP 176065 xec 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°C.

Benefits

- Excellent operational lifetime in both calendar and cycling applications.
- 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 (434.7 Wh/l, and 197 Wh/kg).
- Cycle life > than 2000 cycles at 100% DoD at C/2 discharge, C/5 charge.
- Stainless steel casing.
- Hermetically sealed.
- Maintenance free.
- No memory effect.
- Manufactured in EU.

Designed for todays safety and environmental standards

- Safety: UL 1642 and IEC 62133-2
- Transport: UN 3480, UN 3481.
- Batteries Regulation (EU) 2023/1542
- Quality: ISO 9001, Saft World Class.
- Environment: ISO 14001, RoHS and REACH compliant.

Typical applications

- Industrial equipment.
- Medical devices.
- Tracking appliances.
- Internet of Things devices.
- Wireless Sensor Networks.
- Military equipment.

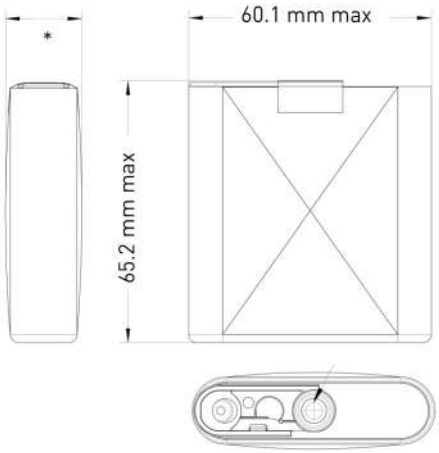
Electrical characteristics		
Typical capacity (at C/5 rate, +25°C, 2.5V cut-off) [i]		8.10 Ah
Nominal voltage		3.65 V
Nominal energy		29.5 Wh
Recommended maximum discharge current [ii]	Continuous	8 A (~1C rate)

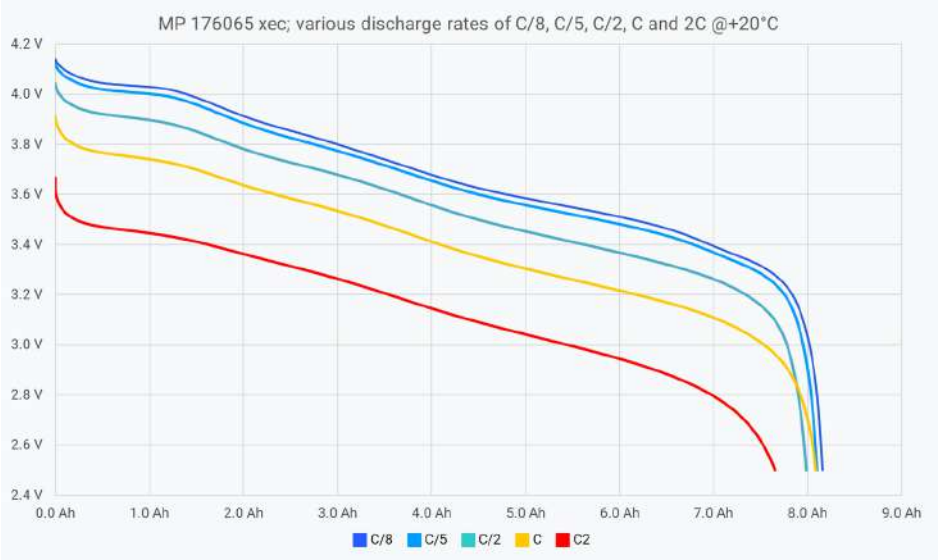
Physical characteristics (sleeved cell)	
Thickness [iii]	19.6 mm
Width	60.1 mm
Height (including terminals)	65.2 mm
Typical weight	150 g
Volume (including terminals)	0.068 l
IEC cell designation	INP20/61/66
Saft internal cell designation	MP 176065 xec
Saft part number	70572Z
Saft type reference	GP31966

Operating conditions		
Typical cut-off voltage		2.5 V
Charging method		Constant current/Constant voltage
Charging voltage		4.2 V
Maximum continuous charge current [iv]		8 A (~1C rate)
Operating temperatures [iv]	Charge	-30°C to +60°C
	Discharge	-35°C to +60°C
Storage & transportation temperatures	Recommended	+10°C to +30°C
	Allowable	-40°C to +60°C

[i] Can vary depending on temperature and discharge rate
[ii] Can vary depending on temperatures. Consult Saft
[iii] Thickness at the centre of the large surface of the prismatic cell at 100% SOC after >800, 100% DoD cycles.
[iv] For optimised charging below 10°C and above +60°C, consult Saft

TotalEnergies





Cell dimensions*

During the lifetime of the cell, in different applications some dimensions may alter slightly. Please consult with Saft for further details.

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 with your specific application requirements.

Battery-level features

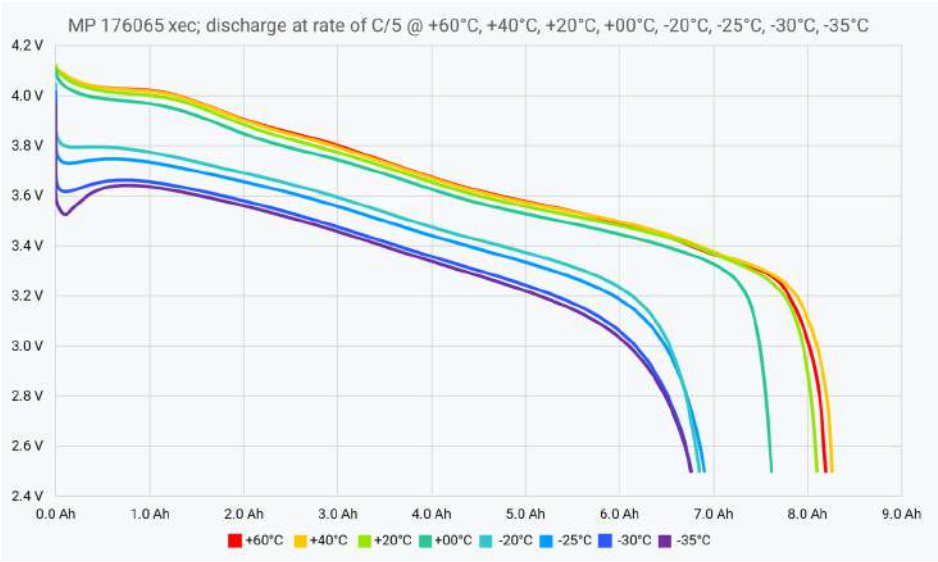
- Saft provides complete battery system designs
- Integrating several levels of redundant safety features.
- Incorporating electronics for performance, cell balancing and temperature monitoring
- Battery protection controller at system level for larger batteries
- Communication for State-of-Charge and State-of-Health

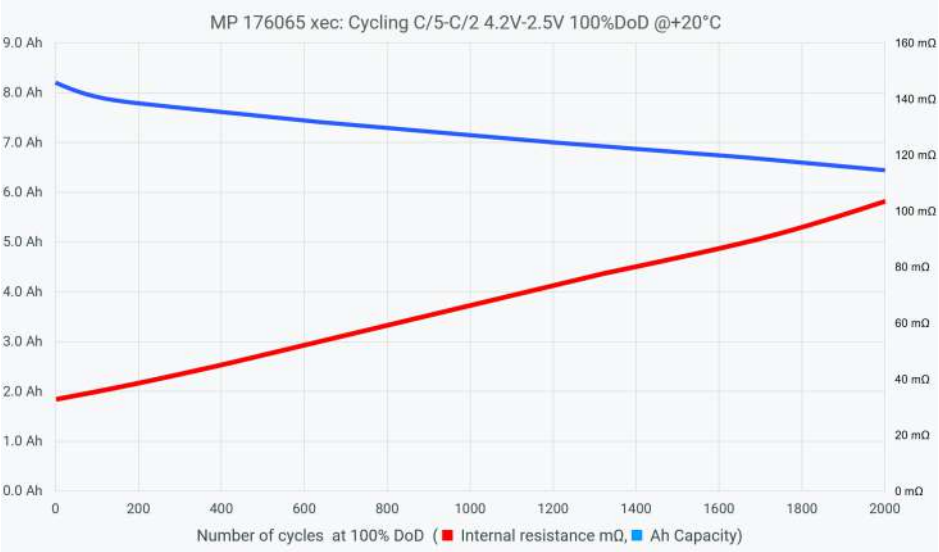
Storage

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

Warning

- Do not crush, short-circuit, incinerate, dismantle, immerse in any liquid or heat above +60°C
- Observe charging conditions
- Refer to our Li-ion Battery User manual for further information on the use and handling of Saft products.





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