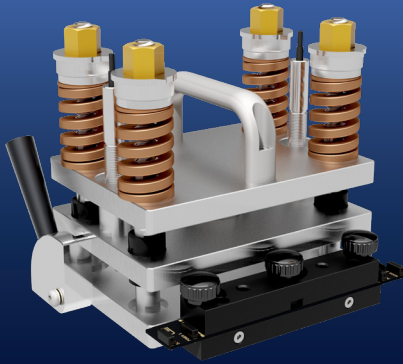


01

Compre Pouch

A versatile stand-alone pouch cell fixture

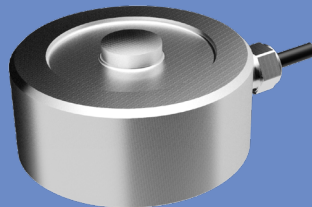
- Switch between pseudo-constant volume and spring-loaded mode
- Follow pressure and thickness changes during cycling
- Large accessible pressure and temperature range
- Small foot-print and low height: Parallelize your measurements
- 2D pressure mapping in combination with e.g., TekScan sensors



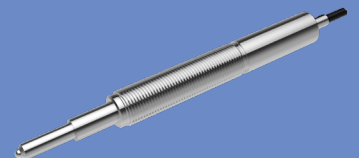
Typical applications

- Cycling of pouch cells at spring-loaded stack-pressure, mimicking flexible installation situations
- Cycling of pouch cells at pseudo-fixed volume, mimicking constrained installation situations
- 2D pressure mapping while cycling at different conditions
- Quantifying pouch cell breathing and swelling during cycling
- Improving reproducibility by well-controlled measurement conditions

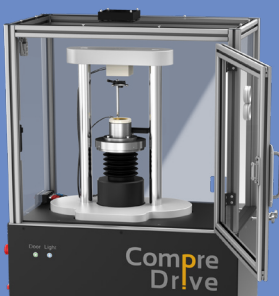
Suitable other products and accessories



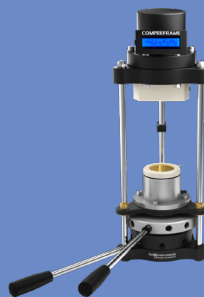
Force sensors



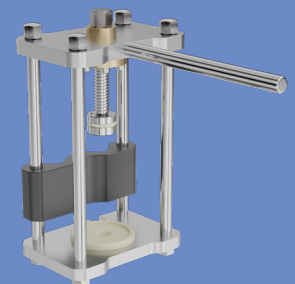
LVDT-Sensor



CompreDrive



CompreFrame



ComPrep

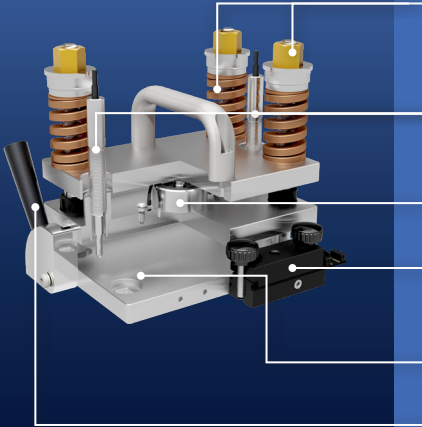


02

Compre Pouch



Detailed view



- Nuts and springs
- LVDT sensor (optional)
- Force sensor (optional)
- Customizable tab connection solution
- Sample area
- Lever for easy access

Selected technical specifications

Max. sample dimensions	120 mm x 110 mm x 20 mm
Max. force	25 kN
Temperature range	T _{operation} = -30 °C ... +90 °C T _{operation LVDT} = -20 °C ... +85 °C
Max. measurement potential	40 V ac/dc
Max. measurement current	5A (using integrated tab connection)
Rated dimensions	ComprePouch: 189 mm x 146 mm x 173 mm Force monitoring electronics: 140 mm x 106 mm x 60 mm
Typical weight	4.6 kg

„We increased the number of specimens under test, while still monitoring all essential values.“
Laboratory Head

Detailed description

The ComprePouch is a cell fixture that enables electrochemical tests of batteries in a pouch cell format at different stack-pressure conditions. It allows for switching between pseudo-constant volume and spring-loaded pressure conditions. As an option it integrates a force sensor, that shows the applied force on an attached display and/or a connected PC. Further options include precise in-situ thickness measurements allowing for a cell breathing and swelling analysis in the spring-loaded mode.

Force is applied by four nuts compressing tension springs. Force is transferred through massive, guided metal plates, and optionally a force sensor, to your sample. The springs can easily be exchanged by ones with different rates or stiff cylinders.

The measured force can be shown on a display and/or monitored and stored via a connected PC. You can use all data handling and plotting features that our CompreDriveControl Software offers.

The sample temperature can be controlled by placing the ComprePouch inside a temperature chamber.

