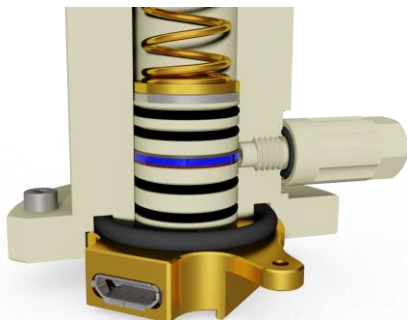


TSC Battery

The allrounder for polymeric and solid samples



The TSC Battery cell family enables electrochemical studies on **liquid air- and moisture-sensitive polymeric and solid samples**, requiring **only small sample amounts**. The sample is contacted by two stainless steel current collector electrodes in a sandwich-like assembly. By default, the PEEK housing contains **two lateral ports** for inserting **reference electrodes** or capillaries ensuring a **high level of flexibility**. Coming with two contact springs with different spring loads, the **stack pressure can be adjusted** to values up to ca. 10 bar.



Typical Applications:

- Determination of the **conductivity of solid and polymeric electrolytes**
- Determination of **MacMullin numbers of separator foils**
- Determination of **tortuosity values of active materials**

Suggested Accessories



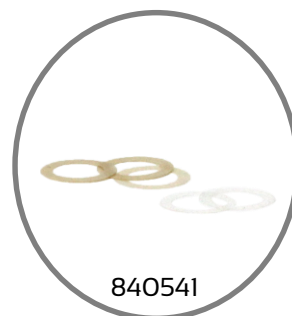
840101

Microcell HC
Basic Package



840582

Microcell
Passive



840541

Spacer Set

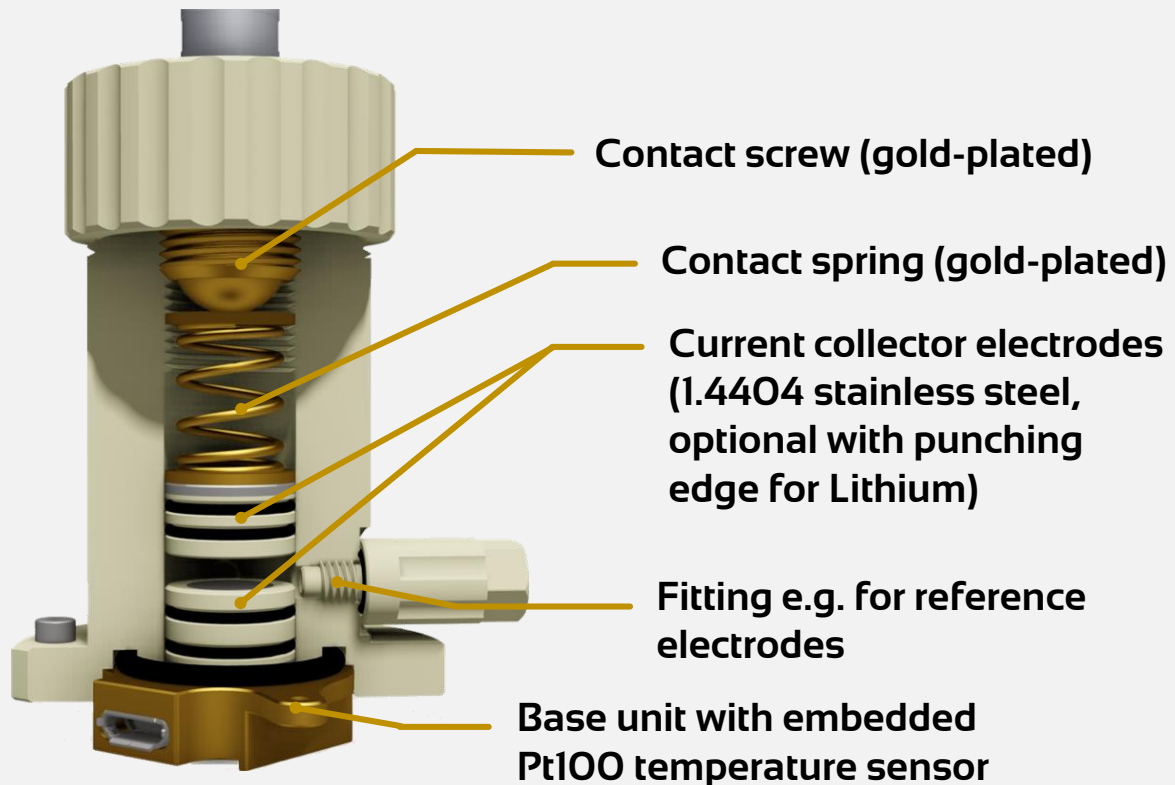


840531

Metal Disc
Electrodes



TSC Battery



Technical Specifications

Suitable samples:	Polymeric foils, solid pellets
Temperature range:	-40 °C ↔ +100 °C
Materials in sample contact:	PEEK, stainless steel 1.4404, EPDM
Max. sample diameter	12.0 mm
Max. sample thickness with min. stack pressure	2.4 mm
Spring rates	2.4 N/mm 32.6 N/mm
Options:	<ul style="list-style-type: none"> • Electrode with punching edge • Housing w/o ports

References

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[2] C. Alter et al., 'Synthesis and characterization of a novel highly phosphonated water-insoluble polymer', *J. Appl. Polym. Sci.* (2020), 137, 48235. <https://doi.org/10.1002/app.48235>

[3] M. Kroll, 'Reconstruction-Simulation Approach Verifies Impedance-Derived Ion Transport Tortuosity of a Graphite Battery Electrode', *J. Electrochem. Soc.* (2018), 165, 13, A3156. <https://doi.org/10.1149/2.0711813jes>

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