

LabCore Solid-State Battery Test Mold with Locking Ring

Model



Overview

The LabCore MOL1B100A is an upgraded compact split-cell mold for solid-state battery research. Building on the proven PEEK-core compact design, it adds an upper locking ring that enables quick, even pressure release and safer disassembly. This is especially valuable for high-frequency sample changes and routine operation inside a glovebox, reducing the risk of damage to the PEEK core, plungers, and samples.

Key Features

- Integrated upper locking ring for quick pressure release and safe mold disassembly
- PEEK inner core: outstanding electrical insulation, chemical resistance, and mechanical strength up to 200 °C
- Compact footprint: $\varnothing 70$ mm $\times$ H93 mm with $\varnothing 10$ mm working cavity
- High-pressure ready: 500 MPa standard, optional 1000 MPa for high-stack-pressure studies
- Humanized insulation and positioning design to reduce assembly errors
- Ideal for frequent sample changes, glovebox operation, and standardized lab workflows

Specifications

Parameter	Value / Specification
Model	MOL1B100A
Product Name	LabCore Solid-State Battery Test Mold with Locking Ring

Core Material	PEEK
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Plunger Material

Die steel

Outer Dimensions

ø70 mm × H93 mm

Working Cavity Diameter

ø10 mm (customizable 5-20 mm on request)

Electrode Configuration	Working / Counter
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Max Stack Force

4 T

Max Pressure	500 MPa standard / 1000 MPa optional
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Max Operating Temperature

200 °C

Screw Head Diameter

36 mm

Special Feature	Upper locking ring with quick pressure release
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Typical Applications

Solid-state battery research, high-frequency sample screening,
glovebox operation

Applications

- All-solid-state battery assembly and pressure testing
- Lithium-metal anode interface research
- Sulfide, oxide, and polymer solid electrolyte evaluation
- High-throughput sample screening and glovebox workflows
- In-situ EIS and long-term cycling tests

Ordering Information

Standard SKU: MOL1B100A-STD-1P

Lead Time: 3 business days (standard, supplier ships same day); contact us for custom options

Packaging: 1 × test mold set (upper plunger, locking components, liner, seal ring, lower plunger, insulating gasket)

Notes

Mold is shipped empty — no electrolyte or lithium metal included. Not classified as dangerous goods. Custom cavity sizes, max pressure upgrades, and OEM/white-label options are available on request. For quotation, bulk orders, or technical support, contact LabCore Materials.

LabCore Materials

Email: support@labcorematerials.com | Web: www.labcorematerials.com