

FACT SHEET

InnoCAP

The InnoCap cell housing cover is a main component of a prismatic or cylindrical battery cell. It is typically the connection between the cell interior and the cell contacting system. The lid is used in cell housings to meet mechanical, electrical and insulating requirements of the battery cell. The cover is able to reach a wide spectrum within e-mobility as well as for stationary storage solutions.





Cell housing cover Multi adaptable and usable

Technology

+ INNOVATIVE POTTING MATERIAL

Electrolyte resistant potting material enables hermetical sealing, while simultaneously providing high mechanical strength and electrical insulation of anode and cathode terminals.

+ COST REDUCTION

High cost competitiveness due to 25 % component reduction and fully automated production process.

+ LOW CARBON DIOXIDE FOOTPRINT

Up to 40 % CO $_{2}$ reduction due to component reduction and simplified production processes.

+ HIGH VERSATILITY

Can be adapted to all prismatic (top tap as well as side tap) and cylindrical form factors. Depending on customer requirements, ElringKlinger's concept can be realized with all conventional housing materials (e.g. aluminum, nickel-plated steel or stainless steel).

+ CHEMICAL RESISTANCE

High chemical resistance of the potting material gasket to all conventional lithium-ion battery electrolytes and immersion-cooling liquids enables long cell lifespan.

+ IN-HOUSE PLASTIC TECHNOLOGY

ElringKlinger's experience in plastic injection molding technology with in-house material development for various application areas enables a wide range of combination options for any customer requirements.

+ IN-HOUSE TOOL TECHNOLOGY

A toolshop within the ElringKlinger Group bundles development expertise worldwide with extensive machinery in which the highest precision tools can be manufactured. High flexibility results from short distances within the company structure is guaranteed.

Benefits

PRODUCT BENEFITS

- + Adaptable to any prismatic or cylindrical cell form factor
- + Less parts compared to state of the art
- + Flexible innovative sealing technology with potting material
- + Longer cell life expectancy due to potting material sealing solution
- + Coverage of multiple functional requirements by the potting material
- + High mechanical strength
- + Cost-efficient design solution with low CO2 footprint

MANUFACTURING PROCESS BENEFITS

- + Larger manufacturing tolerances permissible
- + Simpler geometries of parts possible
- + Less joining processes required

+ Highly automated component assembly possible





ELRINGKLINGER – YOUR PARTNER FOR E-MOBILITY SOLUTIONS WITH BATTERY TECHNOLOGY

Cell Expertise – Cell Components and System Design – Simulation and Testing – Certification – Prototyping – Process Engineering – Industrialization – Integrated Solutions and Components – Recycling

