

SAFETY SYSTEMS FOR EMOBILITY

For Li-ion-batteries and immersion cooled batteries



For more than 60 years, Konzelmann GmbH stands for innovations made of technical and high-performance plastics. The family-run company, headquartered in southwestern Germany, develops plastic components and systems for optimized friction behavior, reduced emissions and improved battery safety in its in-house research and testing laboratories. Its customers are major OEMs and Tier 1 suppliers in the automotive, medical, and industrial sectors. Konzelmann's experts take a holistic approach in solving challenges: Through intensive listening and many years of know-how in the development of technically advanced applications, the customer receives an individual solution with a comprehensive focus on product requirements, process interfaces and costs targets. The results are reduced production costs with superior product properties. The one-stop-shop service approach helps customers around the globe move quickly from idea to actual parts with complex function integrated into a simple design.

Hydrodynamic

3D-Plain-Bearing

Axial force + Radial force = 1 Component



Innovation in drive technology.
Maintenance-free - quiet - saves energy.

Automotive 

Industrial 

Medical 



KONZELMANN
SOLUTIONS IN POLYMER



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Products and technologies

- I. The KBerstring® developed in-house, which enhances battery safety at system-, module-, and cell-level.
- II. The 2-Way-Vent, a pressure compensation unit for oil-filled systems using the never clog vent design for applications like electric drive units, transmissions, differentials.
- III. The hydrodynamic 3D-plain-bearing, a space-saving, maintenance-free and energy + noise reducing bearing. It is preferably used in high-speed applications like pumps or pinion gears.
- IV. Tribological parts used in transmissions, drivetrains, drive modules/units, which include dynamic seal rings for oil circuits to precisely engage a clutch, noise-damping gears for mid-torque applications and cost-saving washers in planetary carriers.
- V. High-performance TPU materials for hydrogen-carrying applications, like FuelCells. Requirements are low-temperature stability, high robustness, high rebound elasticity, high tear resistance, low compression set, low permeability.

Products for the US Market

- KBerstring® with/without pressure compensation
- 2-Way-Vent for pressure compensation in oily air
- Hydrodynamic 3D-plain-bearing
- High dynamic seal rings for hydraulic feedthroughs
- Gears for mid-torque applications
- Pinion washers
- Axial plain bearings
- TPU materials for hydrogen carrying applications

Key differentiators:

- One-stop service approach
- Creative, out of the box thinkers
- Deep technical knowledge in plastics design and functionality of part
- Testing and research labs on-site to validate design, optimizations, and support customer
- Plastic parts allow complex function integrated into a simple design