

E-MOBILITY ELASTOMERIC GASKETS FOR BATTERY HOUSINGS

The **Battery Housing Gasket** prevents intrusion of dust, dirt, salt, and water into the battery housing. The gasket also assists the housing in containing an internal thermal event.

Freudenberg gasket materials are developed to meet the global specifications of the battery housing environment for a **lifetime of effective sealing**. Additionally, Freudenberg gaskets are **designed for fast, efficient assembly** and do not require special surface treatment or additional curing time.

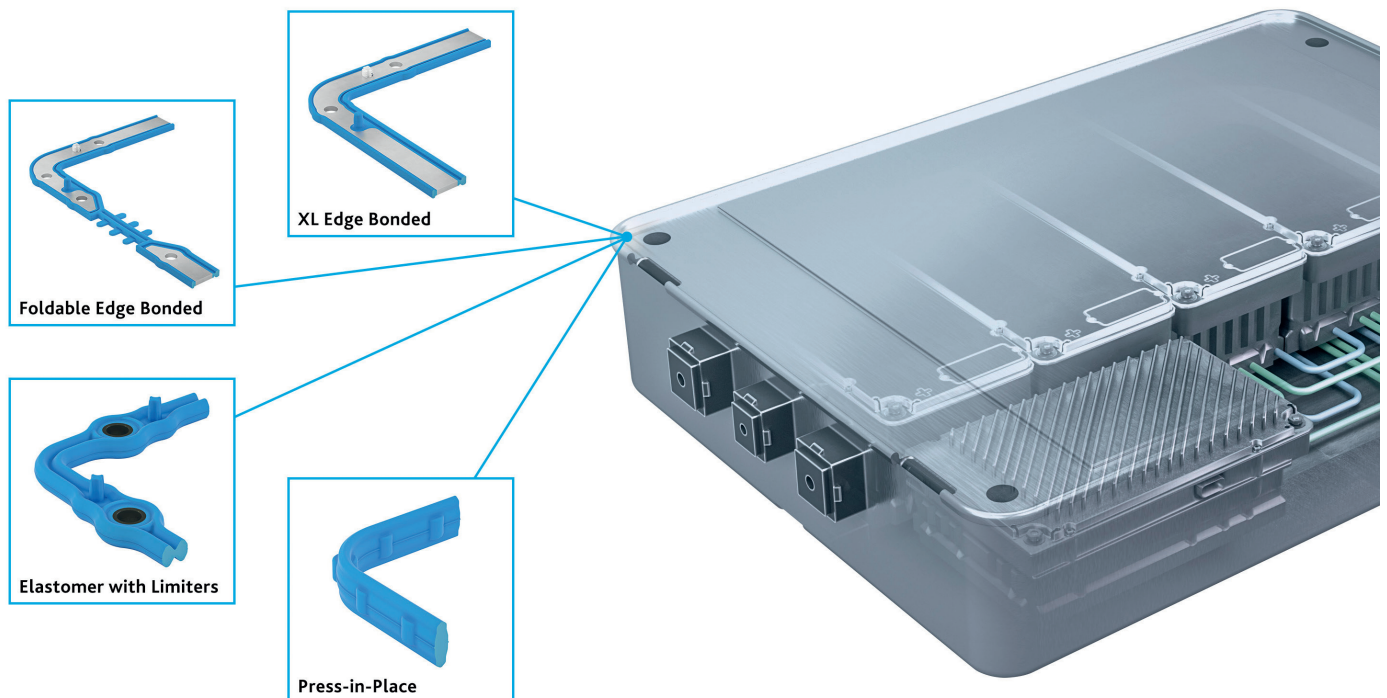
FEATURES AND BENEFITS

Battery housing gaskets portfolio:

- Suitable for all cover and housing combinations of materials, such as aluminum, steel, and composite
- EU REACH 1907/2006/EC compliant materials
- Pass leak tightness requirements of IPX-9K, IPX-7X
- Silicone and EPDM are standard elastomers meeting UL94-HB, UL94-V0 and V1 along with other global specifications
- Ease of opening the cover allows fast access during assembly, service, and end of life
- Suitable for automated assembly or manual assembly by one person

Edge bonded gaskets:

- EMI shielding solution (up to 6 GHz) via electrical conductivity at the carrier contact surface points
- Use for structural housings subject to external force vectors
- Minimize corrosion on hardware with outer bead
- Double inner bead design available to improve sealing performance





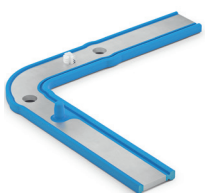
Press-In-Place

- Homogenous rubber gaskets designed to be used with a machined or as-cast groove in the housing
- Typically used for small to mid-size housings for acceptable assembly times
- The groove locates the gasket in the correct position
- Gasket cross section establishes the sealing characteristics
- Ideal for composite housings designed to accommodate a groove for the gasket



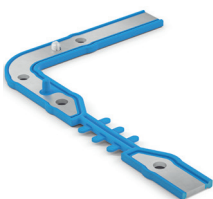
Elastomer with Limiters

- Elastomeric gaskets designed to be used in flat-to-flat housings and cover sealing applications
- Used for small to large housings, (3 to 8 meters perimeter length) utilizing either aluminum, composite or stamped steel assembly construction
- Compression of the gasket is controlled by the compression limiters at the bolt locations
- Electrical conductivity between housing and cover on the contact surface points of the limiters
- Wide double bead design improves sealing performance and corrosion protection
- Molded retention fixtures aid in assembly and allow delivery with the gasket in place for final assembly



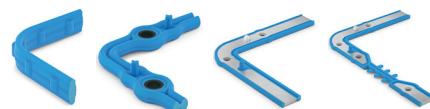
XL Edge Bonded

- Includes continuous aluminum carrier, inner and outer beads, and optional alignment pins/dowels
- Rigid carrier is ideal for fast automated or manual assembly
- Used for small to midsize housings, (1 to 5 meters perimeter length)
- The carrier strength makes it suitable for both structural and non-structural applications
- A selection of carrier thicknesses to match vertical tolerance and optimize gasket compression
- Alignment pins allow for easy assembly and retention of gasket on housing prior to final assembly



Foldable Edge Bonded

- Segmented aluminum carrier, optional alignment pins and rubber connector sealing elements
- Used for midsize to large housings, (5 to 8 meters perimeter length)
- Rigid carrier is ideal for fast manual or automated assembly
- The carrier strength makes it suitable for both structural and non-structural applications
- Flexible connection to compensate large enclosure manufacturing tolerance
- Easy access to housing during initial assembly



Gasket Design Features		PIP	EWL	XLEB	FEB
Housing Design	Compensates to fit housing variations	●	●		●
	Sized to seal cover gap variations	●	●	●	●
	Integrates with structural properties	●	●	●	●
Assembly and Disassembly	Enables quick assembly	●	●	●	●
	Allows for easy serviceability	●	●	●	●
In Use/ Functional	Lifetime sealing performance	●	●	●	●
	Compatible with housing EMI shielding	●	●	●	●
	Prevents corrosion		●	●	●

● Best option for application ● Suitable option for application

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