

FACT SHEET

Metal-elastomer gaskets

SUITABLE FOR E-MOBILITY APPLICATIONS

Metal-elastomer gaskets are used to seal components all over the combustion engine, but also along electric drive units.



Metal-elastomer gaskets made by ElringKlinger

Technology

Metal-elastomer gaskets are characterized by the material combination of metal and elastomer. The metal component acts as carrier and compression limiter for the elastomer bead which finally owns the sealing function.

+ HIGH TOLERANCE COMPENSATION

Metal-elastomer gaskets and the freedom of shaping the cross section dedicated to the application lead to high tolerance compensation compared to metal sealing technologies.

+ IN-HOUSE ELASTOMER TECHNOLOGY

ElringKlinger's experience in elastomer technology with in-house material development including bonding technology offers a wide range of different material combinations, that can be chosen according to the application.

+ EASY MAINTENANCE

In case of replacing glued sealing technology metal-elastomer gaskets can easily be replaced with a high functionality even in the service market.

+ HIGH PRESSURE SEALING

Metal-elastomer gaskets can be used for high pressure applications as well.

+ REDUCED ASSEMBLY CYCLE TIME

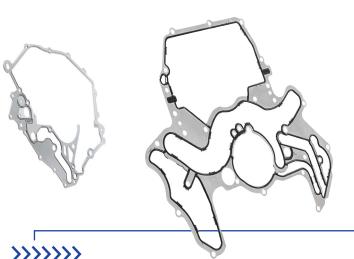
Compared to pure elastomer gaskets, the metal carrier structure of metal-elastomer gaskets allows a one step assembly which can easily be fully automated.

+ REDUCTION OF MANUFACTURING COSTS

The use of metal-elastomer gaskets does not require a groove in one of the sealing components. CNC milling time at customer can be reduced or critical thin die-cast grooves can be avoided.

+ PRE ASSEMBLY

With the right shape of retention features the gaskets can easily be pre-assembled to the sealing components.



Benefits

PRODUCT BENEFITS

- + Robust sealing technology with high pressure sealing
- + Suitable for T-joint
- + Easy maintenance
- + Highest tolerance compensation

MANUFACTURING PROCESS

- + Lower requirements on surface quality compared to conventional metal bead gasket
- + Wide range of elastomer materials (EPDM, FKM, AEM, ACM, HNBR, etc.)
- + Reduced assembly cycle time
- + Fully automated assembly possible

ELRINGKLINGER – YOUR PARTNER METAL-ELASTOMER COMPONENTS

Product Development (Design, Engineering and Simulation) – Process Development – Tool Shop – Tool Sampling/Prototyping – Testing – Change-Management – Series Production – Part Measurement

