



C. OTTO GEHRCKENS
SEAL TECHNOLOGY

2-Component precision seals

Elastomer solutions for maximum safety

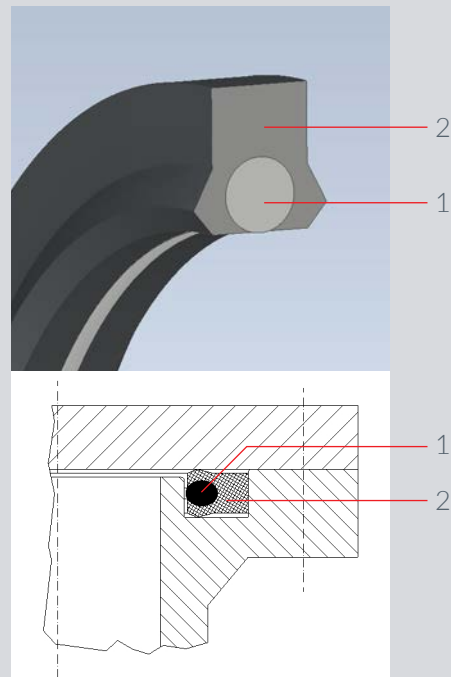
Well combined, optimally sealed

Industrial applications place complex requirements on sealing technology. As a rule a good sealing effect is already achieved through the choice of suitable materials, the correct sealing geometry and groove design. In cases with particular stress the combination of two elastomer components (2K) in one seal can achieve an even

better result. As an expert in sealing technology with its own development and production, COG offers customised 2K elastomer seals for a wide range of applications and requirement profiles. Optimally matched material combinations result in comprehensive and even more flexible application possibilities for the user.

A seal which has a double effect

The essential property of a 2K seal is its double function, which results from the combined materials as well as the geometry and is thus in turn dependent on the respective application case. Often there are two elastomers, one elastic component and one more resistant hard component. Here, the softer „core“ functions as preload element **(1)**, which is enclosed and protected by the low wear, harder sealing element **(2)**.



Two components, many plus points

In practice, a 2 elastomer seal offers numerous advantages which, above all, speak in favour for its use with special requirement profiles:

- Optimum sealing effect with high resistance through material combinations
- Very good sealing effect in depressurised state
- Customised production in small to medium quantities
- Various geometries (axial and radial) and dimensions are possible
- Dead space-free elastomer seal

A connection with numerous possibilities

In process industry plants, in mechanical engineering or also in the food and pharmaceutical sector – customer-specific 2K elastomer seals can be used in many ways to strengthen the sealing effect optimally. Through the individual combination of the respective suitable materials, 2K elastomer seals are especially suitable when maximum safety and service life are required.

In the low to medium pressure range the 2k elastomer seals are particularly suitable in dynamic applications but which makes possible a static employment with high pressures. At the same time, the material properties can be aligned deliberately for the specific chemical and physical requirements of the application, such as media which is to be sealed or cleaning agents.



The mix makes it!

The decisive factor for the selection of the elastomer components used is the respective requirements that an application places on the seal. In many cases, it is important to combine the highest possible elasticity with good chemical or thermal resistance and abrasion resistance. Here, a combination of a silicone and an FKM material can be used. In addition to other material pairings, it is also possible to use two compounds with different hardnesses to optimise the sealing effect further.

@ Plan with us!

*We manufacture 2K elastomer seals „customised“ according to your specific requirements This makes careful planning that takes all technical and also economic aspects into account all the more important. Our application technology is at your disposal for competent advice. **Write to us at: applicationtechnology@cog.de***



COG at a glance

- Founded in 1867 in Pinneberg, near Hamburg
- Independent family business employing over 270 staff
- Supplier and independent manufacturer of O-rings and precision seals
- World's largest O-ring warehouse (over 45,000 items kept in stock for immediate delivery)
- State of the art logistics centre for maximum delivery capability
- Tools available for over 23,000 different O-ring dimensions
- Close cooperation with leading manufacturers of raw materials
- Approvals/certifications for a wide variety of materials, including among others DVGW, NORSOK Standard M-710, ISO 23936-2, BAM, FDA, USP, 3-A Sanitary Standard, BfR, Elastomer Guideline, NSF/ANSI and many more
- Our own mixing and compound development facilities
- Our own toolshop
- COG's technology centre for material development
- Quality management to DIN EN ISO 9001
- Environmental management to DIN EN ISO 14001
- Climate-neutral business operations according to PRIMAKLIMA

More
informations
at www.COG.de
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