

PRESS RELEASE

June 2019 - Simplicity solves complexity – venting caps by KACO



Source: KACO GmbH + Co. KG

The expert for sealing solutions meets highest specifications. By presenting the patented venting cap KACO offers a rather simply looking rubber product matching a well-known complex task for breather systems.

Application scope for KACO venting caps

In applications like gearboxes, axle drives, battery housings but also ECUs there is basically a need for ensuring constant venting or breathing conditions, as for instance pressure differences based on temperature change need to be balanced. Besides this there is a request for so-called “roll-over-breather” solutions which prevent oil leakage in an emergency case of a car roll-over in an accident. KACO solves this complex specification with a relatively simple looking part – the so-called venting cap. This single component part can be assembled directly into the application using for instance a small pipe as well as placing it decentral with a hose or tube in between. Assembly is really easy either to be done in-line or if helpful also after the “end of line test” if this is helpful for the leakage test of the application itself. The patented design makes it possible to ventilate in correlation to a pressure difference between the in- and outside of the application by keeping water and dust out of the system. KACO’s venting cap is already in mass production since 2012 which makes it available as an off-the-shelf product as well as a customized solution for new specifications. Latest software tools for simulation and design work are used for doing that. The venting cap can be adjusted to different IP protection classes, like splash water or flooded conditions. Dependent on the water tightness specified there are different opening and closing pressures for the venting cap, which is always aligned with the customer requirements. Also for existing systems it is basically possible to expand to the KACO venting cap solution.

Use case tested under real life conditions

The expert for sealing solutions sets value on testing his products intensively on model test rigs, for perfectly fulfilling customer requirements. For that reason specific test rigs have been created for the venting cap. For ensuring stable quality for mass production there is specific measurement equipment available. There is an ongoing design process all around the KACO venting caps in order to be capable of dealing with all kinds of applications of conventional and new energy car’s powertrains as well as other fields of usage in general industry.

„It is amazing that this simple looking rubber part can deal with such a complex specification. There is a lot of engineering inside our venting caps and this is also the reason why they are already a

standardized part in many bills of materials of our global customers' applications. No matter for which kind of automotive drivetrain, like gasoline, diesel, hybrid or battery electric cars, KACO's venting cap is first choice for fulfilling automotive standards. But also for non-automotive applications this product can be used of the shelf or as customized product being specifically engineered by our global team" says Vice President Research & Development Andreas Genesisus delighted.

The Expert for Sealing Systems

KACO GmbH + Co. KG, a subsidiary of the Zhongding Group, is one of the world's leading developers and manufacturers of high-precision, practical sealing solutions for the automotive and mechanical engineering sectors. The company, with its headquarters in Germany, has earned a reputation for the highest quality sealing solutions and innovative power as well as for expertise in development and production. KACO has six production facilities in Germany, Austria, Hungary, China and the USA and delivers products across the globe. A trusted partner of the automotive and supplier industry, the company has been keeping pace with the high demands and technical changes of the industry for decades.