Press Releases

PREH SENSOR TECHNOLOGY ON FORD COYOTE V-8 ENGINE

Preh GmbH developed and manufactures the integrated sensor system for the throttle valve on Ford “Coyote” V-8 engines under contract from Pierburg GmbH. The engine is used on Ford F-150 trucks and the Ford Mustang.

In the past five years, Preh has supplied approximately 25 million position sensors to its customers, predominantly for electronic throttle control and exhaust gas recirculation applications. In the past, automotive manufacturers preferred proven potentiometric sensors, but contactless sensors are increasingly in demand. Preh has been integrating Hall-based technology into different product solutions for the past 10 years. Preh integrated the Hall-based contactless measuring principle as a redundant system on the position sensor. The sensor supplies two independent output signals and achieves very high signal accuracy through the optimal positioning of the Hall IC. The sensor system meets the highest thermal requirements in the temperature range from -58°C to +160°C as well as the highest demands for sealing integrity.

“This product demonstrates that we can design and manufacture an economical and highly reliable product by applying a combination of different Preh capabilities, ranging from plastics engineering and fastening technology to sensor design,” says Dr. Hans Michael Schmitt, head of Preh’s sensor development department.

Preh’s technology eliminates the need for a separate preliminary processing step in which the contacts are molded in as inserts. Instead the housing, including the contacts, is molded in a single step. Preh also ensures that all sensor components are traceable.