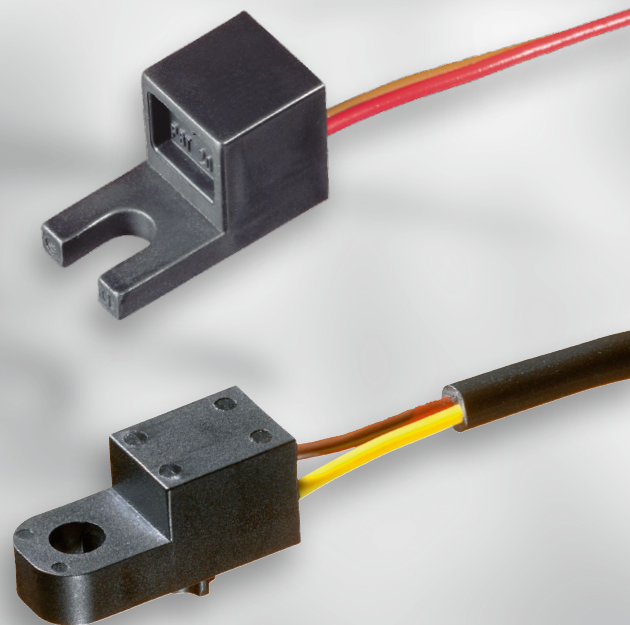


TE Connectivity's
**SENSOR
TECHNOLOGIES**
for the Automotive Industry



Platform Sensors

INTRODUCTION

In the automotive industry, development time is a key factor for successful market positioning. TE Connectivity's answer is a platform strategy for non-contact travel, angle and speed sensors.

Standardized designs and production processes offer short-term availability of fully functional sensors for system testing and low-volume production. Depending on the field of application, different technologies will be used.

The first platform is the PLCD travel sensor for measurement ranges up to 55mm. Thanks to the system's robustness, the possibility of large-scale integration and the high linear performance of PLCD in high-vibration and high-temperature applications, this technology is preferred for harsh environment systems (e.g. transmission, clutch).

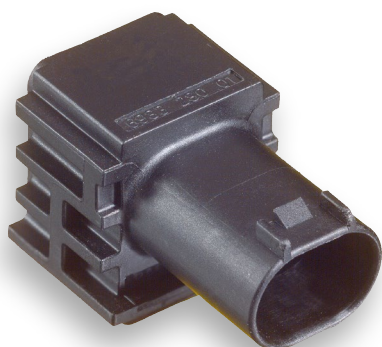
The second platform TE Connectivity can offer is the hall technology based travel and angular sensor for measurement ranges up to 40mm or angle up to 360°. Travel and angle measurement can be realized within one sensor package. The hall technology used is a 2D/3D measurement principle that results in a significant measurement performance increase compared to existing hall sensors.

This sensor exhibits high performance related to linearity error and temperature drift. It also enables the opportunity to incorporate 12V board net supply, safety level B according ISO 26262 and up to three outputs, which can operate as programmable linear or switch outputs.

Compared to inductive systems, TE Connectivity's hall sensor platform needs a minimum of space and makes more cost-effective production possible. Our platform sensors are all suitable for IP class applications of 69K, which makes them suitable for harsh automotive environments. At the same time, the hall platform sensors can be programmed to suit customer specifications regarding measurement range and electrical interface (PWM or analog).

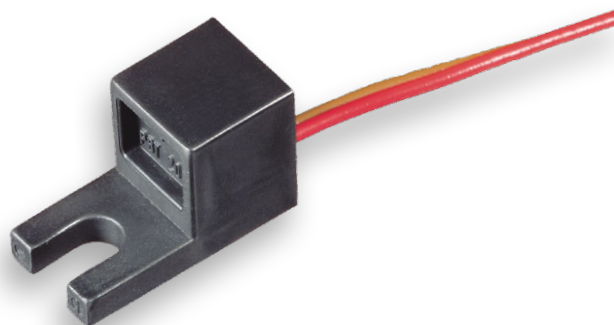
Our third platform is the speed sensor for gear speed measurement. This back-biased hall sensor is triggered by ferromagnetic gear or tone wheel. Thanks to its compact and robust packaging with integrated sealed connector interface (IP69K), it can be used for all kinds of application (e.g. transmission). The sensor also provides diagnostic functionality, thanks to two-wire technology, and is validated for a temperature range from -40°C to +150°C.

Hall Flap Switch SW01M



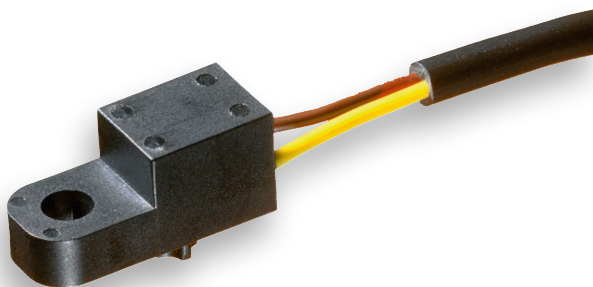
Industry	Automotive
Application	Powertrain, Chassis, Brake
Functions	Digital position detection
Technology	Hall Switch (magnet integrated in sensor)
Features	<ul style="list-style-type: none"> • Triggered by ferromagnetic part (no moving magnet) • Current interface • Sealed connector interface • Diagnostics ability due to two-wire interface • IP69K • Temperature range -40°C ... 105°C

Hall Switch SW01P



Industry	Automotive
Application	Body and Chassis
Functions	Digital position detection
Technology	Hall Switch (magnet integrated in sensor)
Features	<ul style="list-style-type: none"> • Triggered by ferromagnetic part (no moving magnet) • Current interface • Diagnostics ability due to two-wire interface • Temperature range -40°C ... 105°C

Hall Switch SW02P



Industry	Automotive
Application	Body and Chassis
Functions	Digital position detection
Technology	Hall Switch (magnet integrated in sensor)
Features	<ul style="list-style-type: none"> • Triggered by ferromagnetic part (no moving magnet) • Current interface • Diagnostics ability due to two-wire interface • Temperature range -40°C up to 105°C

Hall Sensor T40MC2



Industry	Automotive Industrial & Commercial Transportation
Application	Engine, Transmission, Clutch, Chassis, Brake
Functions	Measuring travel position
Technology	Hall (moving magnet)
Features	<ul style="list-style-type: none"> • Non-contact measurement up to 40mm • Highly insensitive to vibration • Temperature up to +150°C • Analog or PWM interface • Small geometry • Optional redundancy • Supply 5V (optional 12V) • 4-way MCON connector interface