

## Automotive Application

- Throttling device E-GAS,
- Throttling device for idling speed control
- Gear selection sensor
- Steering-angle sensor, LWS
- Electronic pedal sensor, PWG



- 1 Throttling device E-GAS
- 2 Gear selection sensor
- 3 Steering-angle sensor
- 4 Electronic pedal sensor

Application: Motor managment Product 1: Throttling device E-GAS, Product 2: Throttling device for idling speed control

The throttling device essentially consists of the throttle valve, the drive for the throttle valve, and the sensor for the throttle valve position. 1. Full E-GAS systems have been used in series vehicles since 1986. The information detected by the pedal sensor are transmitted to the electric motor-driven throttle valve positioner via control and correction electronics. The current throttle valve position is measured by an integrated DV-E angle sensor which accelerates the vehicle to the desired speed.

2. The idling speed control DVL controls the engine's idling speed through the position of the throttle valve and hence ensures optimal consumption.

## Application: Transmission control Product: Gear selection sensor

Amongst other things, the gear selection sensor consists of a resistance element, wiper and PCB support.

The gear selection sensor has an integrated processor and is basically used for detecting the position of the gearshift.

Since it is a mechatronic system, this sensor comprises such mechanical elements as an integrated unit (electronically controlled automatic transmission). The gearshift is decoupled mechanically from the transmission.

When necessary, the driver can select gears in different gear positions by tipping the gearshift sideways.

## Application: Driving dynamics Product: Steering-angle sensor

The steering-angle sensor basically consists of a resistance circuit and two wipers offset by 90°. The sensor, which is designed as a hollow shaft, is mounted on the steering column in the interior of the vehicle.

Today adaptive control systems in motor vehicles contribute significantly to increasing driving safety. These types of control systems improve the transversal dynamic behavior and assist the driver in critical steering

maneuvers, e.g. when swer-

ving or passing quickly.

## Application: Motor management Product: Electronic pedal sensor

Electronic pedal sensor modules comprise an accelerator pedal, angle sensor and mechanics for simulating the traditional feeling of the accelerator pedal for the driver.

When the accelerator pedal is pressed down, the pedal sensor transmits the information to the control electronics. It calculates the position of the throttle valve on the basis of this information.

Novotechnik Stiftung & Co. Messwertaufnehmer OHG

Postfach 4220 73745 Ostfildern (Ruit) Horbstraße 12 73760 Ostfildern (Ruit)

Tel. +49 (0) 711/44 89-0 Fax +49 (0) 711/44 89-150 info@novotechnik.de www.novotechnik.de

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