Brief description

The HALL sensor solution used in e.g. dual clutch transmission is using two 3D-HALL-Sensor Elements measuring the position of typ. 26 mm with an extremely high accuracy. The sensor magnet, housing, cable and connector can be customized for easy system integration and assembly. The sensor is designed for high temperature applications.

Features

- Non-linearity: 1%
- Resolution: 12 bit
- System accuracy: +/- 1.5%
- Repetitive accuracy: < 50 μm
- Small integration space
- Operating temperature from -40°C to 160°C
- Short temperature peaks up to 180°C possible
- Protection class: IP6K7K, IP6K9K (dustproof, high pressure cleaning)
- Customized cable with flexible fixing solutions
- Robust throughout the vehicle lifetime
- Flexible sensor output (analogue voltage, single PWM, dual PWM, SENT)
- No additional electronics necessary
- Allows quick and easy system integration

Benefits

- No additional electronics required
- Enabling fast and easy system integration
- Unique duroplast injection molding process for high temperature applications

Available support

- Calculation of magnetic field behavior
- Full customization possible

Typical applications

- Dual Clutch Transmissions
- Hybrid drives
- Automatic transmission
- Cars and trucks
- Position detection

Physical characteristics

- Operation Temperature: -40°C to +160°C
- Voltage from controller: 5 V
- Voltage from on-board power supply: 12 V

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HALL Position Sensor Solution
Supporting various different application segments

Application example:
(displacement sensor on clutch slave cylinders)

HALL position sensor for transmission applications (DCT, CSC)
Integrated or stand-alone sensor can be combined with custom cable and connection solution

Sales and further information

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