



HALL Position Sensor Solution

Supporting various different application segments

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

Typical applications

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

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

Physical characteristics

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

© 2019 PEX Automotive GmbH — Rev. 1.0 All rights reserved. The material contained herein may not be reproduced, adapted, merged, translated, stored, or used without the prior written consent of the copyright owner. The information furnished in this publication is PRELIMINARY and subject to changes without notice.

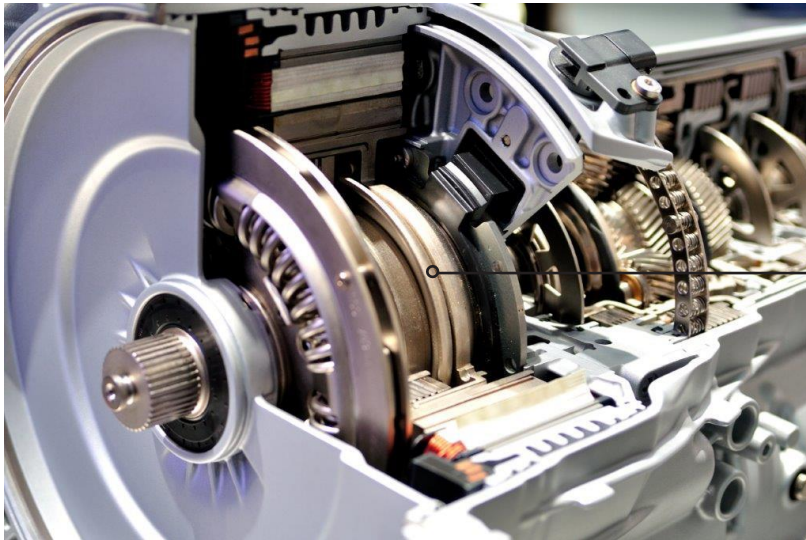


HALL Position Sensor Solution

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

PEX Automotive GmbH
Mühleweg 11
72800 Eningen
Germany

Phone +49 (0)7121 99422 0
Fax +49 (0)7121 99422 01
Email sales@pex.de
www.pex.de

PEX Automotive Systems Kft.
Turul u. 10
2030 Érd
Hungary

Phone +36 24 524 500
Fax +36 24 524 508
Email sales@pex.hu
www.pex.de

DISCLAIMER: This information applies to a product under development. Its characteristics and specifications are **PRELIMINARY** and subject to change without notice. PEX Automotive GmbH (PEX) assumes no obligation regarding future manufacture unless otherwise agreed to in writing. The information furnished hereby is believed to be true and accurate. However, under no circumstances shall PEX be liable to any customer, licensee, or any other third party for any special, indirect, incidental, or consequential damages of any kind or nature whatsoever arising out of or in any way related to the furnishing, performance, or use of this technical data. PEX hereby expressly disclaims any liability of PEX to any customer, licensee or any other third party, and any such customer, licensee and any other third party hereby waives any liability of PEX for any damages in connection with or arising out of the furnishing, performance or use of this technical data, whether based on contract, warranty, tort (including negligence), strict liability, or otherwise.

© 2019 PEX Automotive GmbH — Rev. 1.0 All rights reserved. The material contained herein may not be reproduced, adapted, merged, translated, stored, or used without the prior written consent of the copyright owner. The information furnished in this publication is **PRELIMINARY** and subject to changes without notice.