



Key Features

- xMR Technology
- Zero speed and Bi- direction detection
- Various packaging design
- ASIL B(D)

Applications

- Anti-lock Braking System (ABS)
- Traction Control Systems (TCS)
- Electronic Stability Control (ESC)

WHEEL SPEED SENSOR

Hall Effect/xMR Sensor

TE Connectivity's Wheel Speed Sensor (WSS) utilizes non-contacting Hall Effect or xMR measurement principles to accurately detect the rotational speed and direction of a tone wheel or magnetic encoder, helping provide precise vehicle control and safety. This sensor is an integral component in modern electronic brake control systems, crucial for the functionality of Anti-lock Braking Systems (ABS), Traction Control Systems (TCS), and Electronic Stability Control (ESC).

Variety in Sensor Packaging

This sensor comes in a variety of designs, including several cable, integrated connector, and in-bearing options, catering to various vehicle needs and specifications.

Flexible Cable Assembly

TE provides flexible cable assembly solutions for grommet over-molding and assembly, including multi tooling and modular assembly.

Quality Excellence

The Wheel Speed sensor stands out with an exceptional quality record, maintaining a flawless zero PPM record for over a decade through fully automated manufacturing processes, underscoring TE Connectivity's dedication to providing dependable, high-performance sensors.

[CLICK HERE >](#)
CONNECT WITH AN EXPERT

WHEEL SPEED SENSOR FEATURE SHEET

Hall Effect/xMR Sensor

PERFORMANCE SPECIFICATIONS

The specifications provided are an example of standard offerings tailored to common design needs. If you're looking for a customized solution to fit unique project specifications, our team is ready to offer in-depth support. Contact your local sales representative or click 'Connect with an Expert' below to learn more about our custom solutions.

Product Type	Wheel Speed Sensor
Product Technology	Hall Effect or xMR
Measurement Range	
Sensing target	Ring Magnet
Air gap	Up to 5mm
Single-ended Magnetic signal	± 100 G (bidirectional)
Performance	
Max. Operating Frequency	0 to 2500Hz Non directional 0 to 2500Hz, 2500~5000hz Directional
Output events	4X or 8X per pole pair
Operating Temperature	-40 ~ 150 °C
Duty Cycle	40 to 60%
Output	
Supply Voltage	6 ~ 24 Vdc
Output Types	AK and Pulse Width protocol
Supply Current (Icc)	7 to 28 mA (for AK) 7 to 14 mA (for Pulse Width)
Mechanical Interface	
Configuration	Available wide range of connectors and mounting options

WHEEL SPEED SENSOR FEATURE SHEET

Hall Effect/xMR Sensor

Have a unique challenge? We've got you covered.

At TE, we understand the critical role of precise, high-quality sensors in automotive engineering. Our solutions, developed through advanced engineering capabilities and industry application knowledge, are tailored to meet demanding technical requirements. Around the world, we provide responsive service and seamless integration into your existing systems. If you're looking for sensors that deliver both performance and reliability, let's connect. Our team is ready to discuss how we can contribute to the success of your next project with our customized sensor solutions.

[CLICK HERE >](#)
CONNECT WITH AN EXPERT

NORTH AMERICA

Tel +1 800 522 6752

EUROPE

Tel +31 73 624 6999

ASIA

Tel +86 0400 820 6015

te.com/sensors

TE Connectivity, TE, TE Connectivity (logo) and Every Connection Counts are trademarks. All other logos, products and/or company names referred to herein might be trademarks of their respective owners.

The information given herein, including drawings, illustrations and schematics which are intended for illustration purposes only, is believed to be reliable. However, TE Connectivity makes no warranties as to its accuracy or completeness and disclaims any liability in connection with its use. TE Connectivity's obligations shall only be as set forth in TE Connectivity's Standard Terms and Conditions of Sale for this product and in no case will TE Connectivity be liable for any incidental, indirect or consequential damages arising out of the sale, resale, use or misuse of the product. Users of TE Connectivity products should make their own evaluation to determine the suitability of each such product for the specific application.

© 2024 TE Connectivity Corporation. All Rights Reserved.

Version #01 01/2024

