PRODUCT INFORMATION

Wheel Speed Sensors

→ High quality products
→ Meets OEM specifications
→ Diverse range of sensors including high quality cables
→ Mounting kit included: bush and grease (where applicable)

PRODUCT FEATURES

Design and function
The wheel-speed sensor (ABS sensor) is an inductive passive sensor composed of a permanent magnet, copper winding, a sensing core, case and an electric cable with dedicated socket which works without power supply. ABS sensors usually have cables with or without protection covers, lenghts of different sizes and sensor angles at 90 degrees or straight.

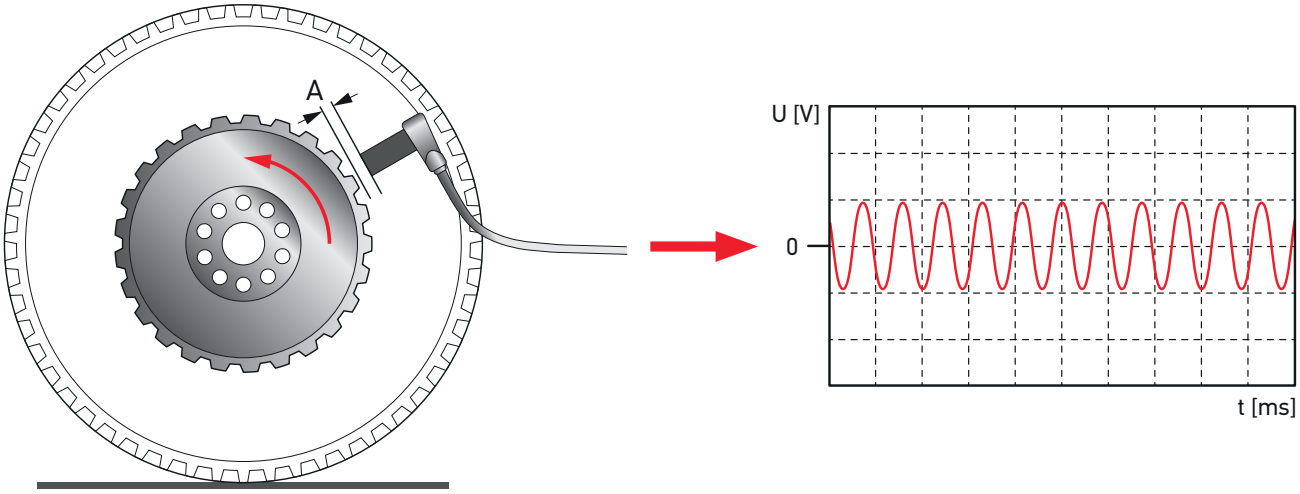
When the polar wheel starts to spin it generates a signal in the form of alternating current, this signal is used by the ABS modulator to prevent the wheels from locking when the service brake is applied, by reducing the braking force on the respective wheels or for the ASR (Anti Slip Regulation) system to apply the braking forces to the traction wheels that slip.

Product Replacement / Lifespan
The lifespan of an ABS sensor is influenced by various factors, including driving conditions, road quality, and maintenance practices. Typically, these sensors may have a lifespan ranging from 5 to 10 years, or potentially longer. Nonetheless, it is crucial to conduct regular inspections of the sensors, particularly if any warning signs are observed.

Indicators of a Wheel Speed Sensor:
Similar to other components of a vehicle, ABS sensors may deteriorate over time or sustain damage. Should you observe any of the following indications, it is advisable to have the ABS sensor evaluated or replaced:

1. **ABS Warning Light:** The most apparent sign, the ABS warning light activates when the system identifies a malfunction, often signifying an issue with a sensor.
2. **Malfunctioning ABS System:** If you experience wheel lockup during hard braking or encounter diminished braking responsiveness when anticipated, it may indicate improper functioning of your ABS system.
3. **Audible Clicking or Grinding Noises:** Such sounds, particularly during braking, could suggest a defective sensor or an issue with the wiring of the sensor.
4. **Inconsistent Speedometer Readings:** Occasionally, a malfunctioning ABS sensor may disrupt the vehicle's speed sensor, resulting in inaccurate speedometer displays.

FUNCTIONAL DIAGRAM



The wheel speed sensors are mounted directly above the pulse wheel connected to the wheel hub. The pole pin, which is surrounded by a winding is connected to a permanent magnet, whose magnetic effect extends to the pole wheel. The rotational movement of the pulse wheel and the associated change of tooth and tooth gap causes a change in the magnetic flux through the pole pin and the winding. This changing magnetic field induces a measurable alternating voltage in the winding.

The frequency and amplitudes of this AC voltage are in proportion to the wheel speed. Since the signal range for signal recognition is defined by the ABS modulator, the amplitude height must be within a voltage range. The distance (A) between the sensor and the pulse wheel is determined by the axis design.

Installation
Easy to mount due to 1:1 replacements in OE Quality.

Product features, specifications and availability are subject to change without notice.

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