Sensor Systems

NO\textsubscript{x} Sensor

The NO\textsubscript{x} sensor is a self-contained multifunction sensor that can measure not only the NO\textsubscript{x} concentration in the exhaust gas but also the air-fuel ratio. The sensor can be used to control various types of exhaust gas aftertreatment and thus helps to comply with current and future emission regulations.

Features

- Supports compliance with applicable emission regulations
- Meets the requirements for on-board diagnostics
- Increased fuel economy
- Triple signal output:
  - NO\textsubscript{x}, concentration
  - linear Lambda (λ)
  - binary Lambda (λ)
- Digital data transmission via CAN bus (SAE J1939)
- Integrated control electronics – no additional hardware required for engine management
- Independent of catalyst and ECU manufacturer and engine management system
- Self-diagnostics

Technical Data

- Multi-layer sensor based on ZrO\textsubscript{2} with integrated heating and 3 oxygen pumps
- Triple output signal
  - NO\textsubscript{x}, binary λ, linear λ or O\textsubscript{2} concentration.
- Power supply 12 V or 24 V
- Data connection CAN Bus 2.0 or SAE J1939
- Self-diagnostics for wire break and short circuit in the connection sensor / electronics
- Maximum ambient temperature electronics
  - -40 °C to +105 °C (-40 °F to 221 °F)
- Gas operating temperature 100 °C to 800 °C
  - (212 °F to 1472 °F)
- Measuring ranges
  - NO\textsubscript{x}: 0 to 1500 ppm, λ: 0.75 to air

Ordering Information

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<th>Description</th>
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<td>NO\textsubscript{x} Sensor</td>
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