Automotive Oxygen Sensor

This sensor measures the concentration of oxygen in exhaust gas, providing a feedback signal to the ECU. The ECU then adjusts fuel injection to control the air-fuel ratio near the theoretical value, reducing exhaust pollution.

Product Overview

Optimizing Engine Performance and Emissions

This automotive oxygen sensor is a critical component for modern vehicle emission control systems. By accurately measuring the oxygen concentration in exhaust gases, it provides essential feedback to the Engine Control Unit (ECU). This allows the ECU to precisely adjust the air-fuel mixture, ensuring optimal combustion efficiency and significantly reducing harmful exhaust pollutants.

Technical Details

Primary Function	Measures exhaust gas oxygen content for closed-loop fuel injection control
ECU Interaction	Sends feedback signals to the Engine Control Unit to adjust fuel injection quantity

Design & Construction

Key Design Elements

- Threaded body for exhaust manifold/catalytic converter installation
- Protective metal shield with vent holes
- Ceramic sensing element
- Electrical connector for wiring harness integration

Wiring Configuration	Blue cable, Red connector