Engine management
Knock sensor

BOSCH
Invented for life

Product benefits

- Increased torque, maximum engine performance
- Protection of the engine from uncontrolled combustion
- Reliable engine operation even at various levels of fuel quality

1 Connector
2 Cable
3 Sensing unit

Vehicle segments

economical

The knock sensor helps **reduce fuel consumption** and, subsequently, CO_2 emissions.

Task "Knocking" occurs when the air-fuel mixture self-ignites prematurely. Sustained knocking causes damage primarily to the cylinder head gasket and cylinder head. Knock control can help avoid this by detecting knocking using a knock sensor and then adjusting the ignition time accordingly. The aim of knock control is to obtain the maximum energy yielded from various levels of fuel quality.

Function The knock sensor is mounted on the engine body and measures the structure-borne noise using a piezo-electric measuring element. Once it detects the characteristic knocking frequencies, the sensor translates them into electrical signals and sends these to the control unit.

Technical characteristics

Characteristics	Linear over a large frequency range
Temperature range Standard	–40 °C to +130 °C
Temperature range Optional	≤ 150 °C
Technology	Piezo ceramic ring
Types	Plug-in or cable

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