



# PRODUCT INFORMATION

## KNOCK SENSOR

- High precision also under extreme conditions
- Applications available for all European and Japanese brands
- Improved efficiency and longer service life
- Higher engine performance
- Compact product design

## PRODUCT FEATURES

HELLA satisfies the increased demands for intelligent vehicle electronics solutions with a wide-ranging, innovative sensor portfolio covering accelerator pedal sensors, position sensors, steering sensors, medium sensors, air-conditioning sensors and rain/light sensors. Many leading automotive manufacturers have for many years been trusting HELLA's electronics know-how and our longstanding development and product expertise in this area.

The high-quality HELLA knock sensors cover a broad vehicle spectrum and are conceived for the special requirements of the specific engine.

### FUNCTION

The knock sensor is located on the outside of the engine block. It is intended to record knocking noise in all engine operating states in order to prevent engine damage.

The knock sensor "listens out for" the structure-borne vibrations from the engine block and converts these into electrical voltage signals. The signals are filtered and evaluated in the control unit. The knocking signal is assigned to respective cylinder. If knocking occurs, the ignition signal for the respective cylinder is adjusted in the "late" direction until knocking combustion no longer occurs.

### How to identify a faulty knock sensor?

A faulty sensor can manifest itself in different ways through fault detection by the control unit and the resulting emergency program strategy.

Frequent fault symptoms are:

- Engine warning light comes on
- Error code is stored
- Reduced engine power
- Increased fuel consumption

### Causes for faulty knock sensors

Failure can be caused by different reasons:

- Internal short circuits
- Breaks in wiring
- Wiring short circuit
- Mechanical damage
- Incorrect mounting
- Corrosion

# HELLA KNOCK SENSORS

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

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