

KNOCK SENSOR

Original Bosch Knock Sensor KS4-P

The KS4-P sensor is designed to detect structure-borne vibrations in spark ignition engines caused by uncontrolled combustion. Engineered for durability, it performs reliably even in extreme operating conditions.

APPLICATION

Frequency	3 to 25 kHz
Operating temperature range	-40 to 150 °C
Storage temperature range	-30 to 60 °C
Max. Vibration	≤ 800 m/s ²

MECHANICAL DATA

Male thread (for cast)	M8x25
Male thread (for Al)	M8x30
Installation torque	20 ± 5 Nm
Weight w/o wire	48 g
Protection	IP X9K

ELECTRICAL DATA

Range of frequency	3 to 25 kHz
Sensitivity at 5 kHz	26 ± 8 mV/g
Max. sensitivity changing (life-time)	-17 %
Linearity between 5 to 15 kHz (from 5 kHz value)	-10 to 10 %
Linearity between 15 to 20 kHz (linear increasing with freq)	20 to 50 %
Main resonance frequency	30 kHz
Impedance	> 1 MOhm

Temperature dependence of sensitivity	0.04 mV/g°C
Capacity field	1,150 ± 200 pF

CONNECTORS AND WIRES

Mating connector 2-pole	2-Pin RB-Kp.1 (F02U.B00.966-01) or 2-Pin Jetronic (D261.205.288-01)
Pin 1	Sig+
Pin 2	Sig+

INSTALLATION NOTES

- The KS4-P can be connected to all Bosch Motorsport ECUs featuring knock control.
- The sensor must rest directly on the brass compression sleeve during operation.
- To ensure low-resonance coupling of the sensor to the measurement location, the contact surface must be clean and properly machined to provide a secure flush mounting.
- Please route the sensor wire in a way that prevents resonance vibration.