## **FUEL PRESSURE** SENSOR



## **ITS FUNCTION**



The fuel pressure sensor is a key component in the injection system of internal combustion engines. It **measures the fuel pressure in the fuel** system in real time and transmits this information to the engine control unit (ECU) to optimise injection management and provide optimum engine performance.

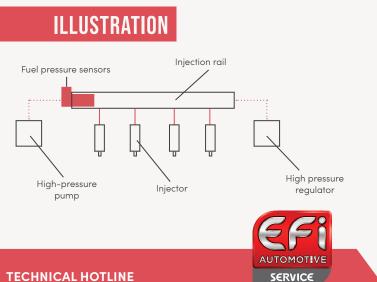
Its correct operation is crucial to **performance**, fuel consumption and the reduction of pollutant emissions.

## GOOD TO KNOW

The fuel pressure sensor is generally located in one of two places, depending on the type of engine:

- In the injection rail (common rail): in direct injection diesel and petrol engines, it is installed directly on the common rail to measure the high-pressure fuel pressure.
- On the low-pressure circuit: in some systems, it can be positioned before the high-pressure pump to monitor the supply pressure and ensure that the injection system is working properly.









## **TECHNOLOGIES**

Fuel pressure sensors can use **several technologies**, each with its own advantages and specific applications: piezoresistive technology, strain gauge technology and capacitive technology.

Piezoresistive technology appears to be the most common on the market because of **its reliability**, **cost and accuracy under high pressure conditions**.