

Responsible for measuring the pressure difference in exhaust gases, between the inlet and outlet of the particulate filter, or the atmospheric pressure. The Differential Pressure Sensor is an integral part of the anti-pollution system in diesel engines to comply with the European emission standards.

There are two systems:

- Particulate **filter systems without additive (DPF)** Combustion at 600° C
- Particulate **filter systems with additive (FAP)** Slow combustion at 300-350° C

References

+55

Applications

+8k

VIO

+44M



Filter Inlet Pressure

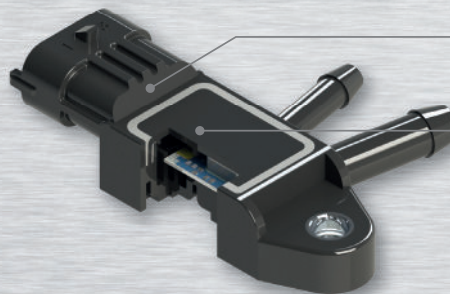
Filter Outlet Pressure

Terminals

Nickel-coated.
More connectivity, less corrosion.

Sensor Element

OEM production. Customizable.

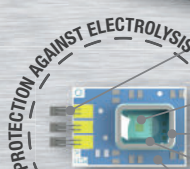


Body

In-house design and manufacturing with high-performance materials (PBT and PPS).
High quality of Coating, Plating, and Sealing materials.

Pressure Chambers (Outlet and Inlet)

Sealed with epoxy. Fully watertight.



Bonding

Made of aluminum, enhancing connectivity, mechanical strength, and stability.

Electronic Circuit

Free from ECU interference. Customizable.

Die Protector

Prevents damage from impacts or vibrations.

Silicone Gel

Provides mechanical and chemical protection for the circuit against external agents.

Ceramic Plate

High resistance, dissipates temperature effectively.



Benefits of Replacement

- Improved emission control
- Extends the life of the Particulate Filter



Symptoms of Malfunction

- Cyclic filter regenerations when unnecessary
- Loss of power if the sensor fails to correctly detect the saturation level of the filter
- Illumination of the particulate filter warning light and flashing of the preheating indicator light
- Shortened filter lifespan due to improper regeneration timing



Causes of Failure

- Deterioration of tubes (breakage, porosity, cracking...)
- Deterioration of connection cables or connector
- Sensor element deterioration causing incorrect pressure readings
- Sensor leakage issues
- Deterioration of the bond between tubes and sensor or the particulate filter

Ref. 16127



Ref. 16157

