

Air Pressure Sensor (APS)

For air pressure applications



Product description



The Air Pressure Sensor was derived from our Climate Control Pressure Transmitter (CCT). This hermetically sealed and robust aluminum housing makes this sensor a cost-effective solution. The APS is compatible with a wide range of media thanks to its high-quality stainless steel measuring element. Its innovative evaluation electronics reliably provide highly accurate measurement data over a wide temperature range via an analog interface.

Specifically tailored to the requirements of the automotive industry, the CCT also complies with the current provisions regarding EMC and ESD.

Fields of application

- On board and build in air compressor for trucks and SUV

Features

Specially designed stainless-steel measuring element

- Excellent long-term stability
- High compatibility with fluids

Application-specific evaluation electronics

- Tried-and-tested automotive EMC/ESD resistance
- Extended diagnostic and protective functions

- Corrosion resistant
- Light weight
- Cost effective

Variety of analogue and digital output signals available

- Easy integration into existing systems
- High volume production line available (up to 2 Mio. pieces per year)

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Technical Specification

Measurement Range

Nominal pressure	-1 bar–10 bar
Over pressure	70 bar
Burst pressure	105 bar
Pressure type	Relative

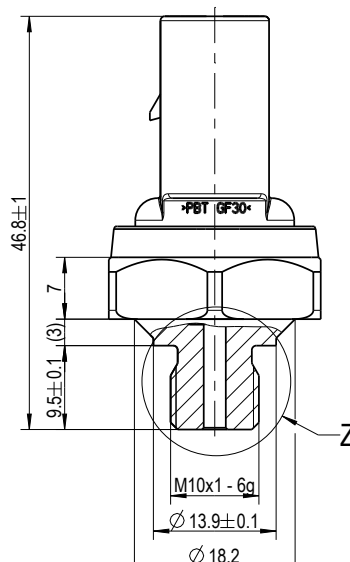
Electrical Characteristics

Supply voltage	5 V±0.5 V
Current consumption	max. 10 mA
Output signals	0.5–4.5 V, ratiometric

Mechanical Characteristics

Measuring element	Stainless steel cell with resistive measuring bridge
Housing material	Aluminium
Pressure connection	HEX 24, M10×1.26
Thread	Female thread ¹⁾

Dimension



Electrical connection	3-pin RD plug ¹⁾
Installation position	Any
Weight	Approx. 16 g

Accuracy

Total pressure error	±1 % FS (20–80 °C), ±2 % FS (-40–125 °C) ²⁾
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Environmental Conditions

Operating temperature range	-40–125 °C
Media temperature range	-40–125 °C (150 °C)
Media compatibility	Air

¹⁾ Other pressure and electrical connections available on request

²⁾ Includes repeatability, hysteresis, non-linearity (TBL), calibration and temperature effects; depends on pressure and temperature range

