

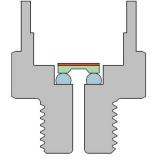
# PRESSURE SENSORS

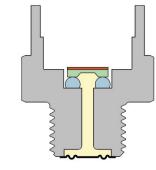
11.2023



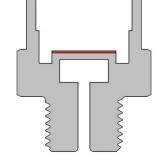


#### **Pressure sensor elements**

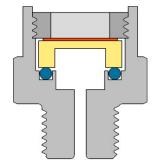




Silicon wetted (in contact with media) Silicon media isolated



Stainless steel Thin film



Ceramic Thick film



Main advantages

### Silicon wetted vs. ceramic thick film

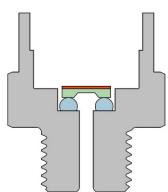
Measuring

cell

~ . . .

Medium

#### Pressure sensor elements



Silicon	Filtered / dry / lubricated compressed air neutral gases	MIN: -1 bar MAX: 12 bar	Favorable design High accuracy in low pressure /
			vacuum ranges
			Smallest designs possible
			Insensitive due to measurement electronics on the bac
Ceramic	Fluid group 2 media	MIN: -1 bar MAX: 600 bar	High accuracy with very good long- term stability
			High corrosion resistance
			Resistant to dynamic pressure surges
			High burst strength

Pressure

range

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### P.Trace

Small and robust pressure sensor for mobile machines

The <u>P.Trace</u> is one of the smallest and yet robust sensors with ceramic measuring cell. Due to the long-term stability of the measuring cell, high accuracy is permanently guaranteed.

- Pressure range between -1 bar ... 600 bar
- Housing material: stainless steel 1.4404
- Gasket material selectable: NBR, FKM or EPDM
- MTTF (40°C) of 2236 years (continuous operation)
- M12 connector, available as current or voltage output



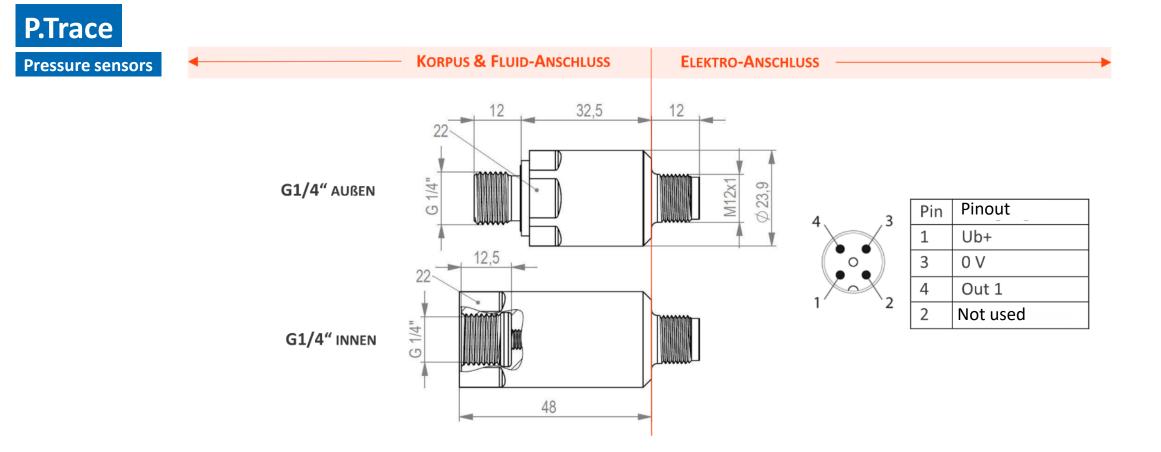


G ¼" (external) thread



G ¼" (internal) thread

#### 



- Design: Compact, without digital display
- Connection: M12 4-pin
- On-board voltage:
  - 9 V ... 30 VDC (Current output)
  - 13 ... 30 VDC (Voltage output)

- Outputs: Analog output 0-10 V, 1-10 V, 4-20 mA
- Protective circuit: reverse polarity protection, short circuit protection
- Mounting position: Any

- Operating temperature: -25°C...+80°C
- Medium temperature: -25°C....+100°C
- Protection class: IP65 / IP67 / IP68

Other accessories —



One of the smallest sensors with integrated display and yet extremely robust!



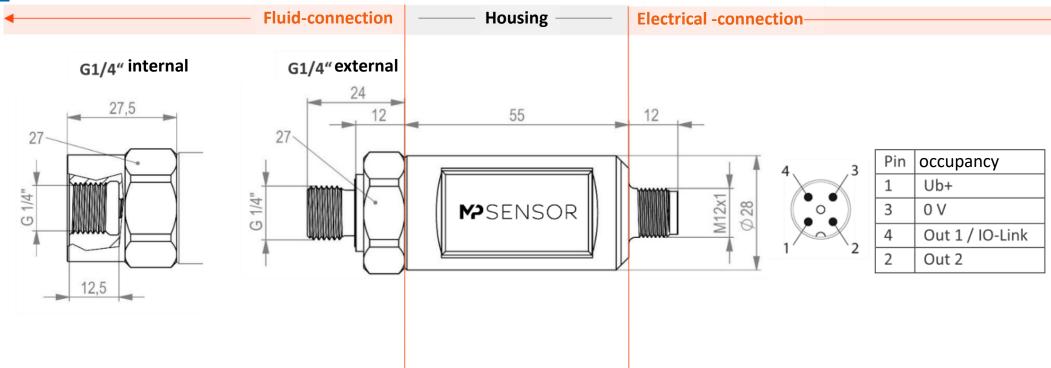
**Control via TFT touch display** The P.Touch is equipped with a TFT touch display. This can be used both to display the pressure and to set the switching points via a virtual rotary wheel. By recording pressure peaks, for example, it is also ideal for service purposes.

- Pressure ranges -1...600 bar depending on variant
- Digital (PNP/NPN/Push-Pull), analog and IO-Link output
- Various diagnostic functions such as operating hours and pressure peak counter
- Display / housing rotatable by 350°, even after mounting the process connection
- Process connection G 1/4" with internal or external thread



## P.Touch

**Pressure sensor** 



- Design: With color touch display
- Connection: M12 4-pin
- Protocol: IO-Link
- On-board voltage: 9...30 VDC

- Mounting position: Any
- Operating temperature: -25°C...+80°C
- Medium temperature:-25°C...+100°C
- Protection class: IP68

- Outputs: Analog output 4-20 mA
- Switching logic: NO/NC (programmable)
- Protective circuit: reverse polarity protection, short circuit protection



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