

Pressure sensors OEM

with internal diaphragm for gauge pressure and absolute pressure

Accuracy 1%

Standard output: 4...20 mA; 2-wire

or 1 ... 5 VDC; 3-wire or 1 ... 6 VDC; 3-wire or 0...10 VDC; 3-wire



Description

Pressure sensors OEM are top of the range pressure sensors. With their technical qualities and the attractive price level, they are suitable for OEM applications with mean and high quantities.

The compact sensor design with G 1 4 B pressure connection enables space-saving and low-weight installation.

The materials and technology used make these pressure sensors insensitive to chemically aggressive media and mechanical load.

Measuring ranges from 0...1 bar up to 0...1000 bar, graded in accordance with EN, offer a wide range of possible applications. The overload limit up to 10 bar is 3.5x, between 16 and 600 bar twice and for 1000 bar 1.5x of the rated pressure.

For connection of an electrical output signal, plugs according to DIN EN 175301-803 form A or cable outlets are available.

The OEM pressure sensors meet the electromagnetic compatibility (EMC) requirements of EN 61326.

Features

- · Corrosion resistant stainless steel design
- · Medium wetted parts of stainless steel
- No internal sealing elements
- Pressure connection G1/4 B
- · High peak pressure resistance
- High alternating load resistance
- High long-term stability
- For dynamic and static measurements

Ranges

Gauge pressure 0...1 bar to 0...1000 bar Absolute pressure 0...1 bar to 0...16 bar

Applications

Pressure measurement for OEM applications like:

- Automation,
- Machine and apparatus design,
- Air compression,
- Refrigeration and air conditioning,
- Lifting and conveyor systems.

Models: P3296

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p. 1/4

Technical data

| Model | P3296 | | | Option |
|-----------------------------|---|-------------------------------------|--|---------------------------------------|
| Pressure type | absolute | positive gauge pressure | | |
| | pressure | | | |
| Output signal | | 420 mA - | | |
| | 15 VDC - 3-wire | | | |
| | | 16 VDC - 3-wire 010 VDC - 3-wire | | |
| | | 010 VDC - | | |
| Accuracy | | ± 1 % of F.S. | | |
| Ranges according to EN | 0 1 bar 0 16 bar to | | | other ranges on request |
| | | | | |
| 0 | 0 16bar 0 1000 bar | | | |
| Sensor element | piezoresistive thin film | | | |
| Repeatability | ≤ ± 0.1 % of F.S. | | | |
| Stability (annual) | ≤ ± 0.3 % of F.S.in rated conditions | | | |
| Case | stainless steel 1. | | | |
| Pressure connection | G 1/4 B acccording EN 837 | | | other pressure connections on request |
| Wetted parts | Stainless steel | | | |
| Overload limit | ≤ 10 bar 3.5 x; ≤ 600 bar 2 x; 1000 bar 1.5 x; vacuum resistant | | | |
| Electrical connection | plug acc. to DIN EN 175301-803 form A with junction box | | | cable outlet |
| Power supply | 1030 VDC, (1430 VDC for voltage output) | | | |
| Power consumption | output 420 mA: signal current output 020 mA: signal current + 4 mA | | | |
| | | | | |
| | voltage output: 8 mA | | | |
| Load | $420 \text{ mA} \leq (UB [V] - 10V) / 0.020A$ | | | |
| | 010 V \geq 10 KΩ 15 V \geq 5 KΩ 16 V \geq 6 KΩ | | | |
| | | | | |
| | | | | |
| Temp. compens. range | 080°C | | | |
| Temperature influence | | | | |
| - zero point | ± 0.4 % / 10 K | | | |
| - measuring range | ± 0,3 % / 10 K | | | |
| Response time | ≤ 5 ms (within 10 % to 90 % of F.S) | | | |
| Protection type | IP 65 EN 60529 / IEC 529 | | | IP 67 with cable outlet |
| Emission 2) | according to EN 61326 | | | |
| Interference ²) | according to EN 61326 | | | |
| Electrical protection types | polarity, overvoltage and short-circuit protection | | | |
| Temperature ranges | | | | |
| - Storage | -30 100 °C | | | |
| - Medium | -40 100 °C | | | |
| - Ambient | -30 80 °C | | | |
| Weight | approx. 0.15 kg | | | |

of F.S.= of full scale value

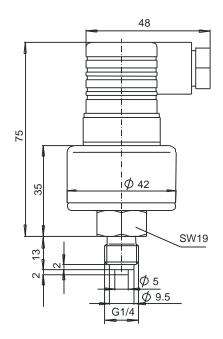
¹⁾ Terminal point adjustment

²⁾ Declaration of conformity on request

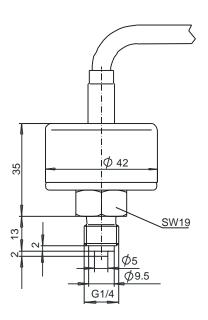
Dimensions

Case

plug according to DIN EN 17-5301-803 form A

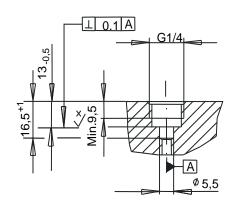


cable outlet



Screw-in aperture according to EN 837

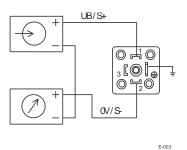
G 1/4



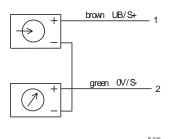
Electrical connection

Two-wire system

plug according to DIN EN 175301-803 form A

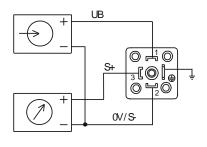


cable outlet

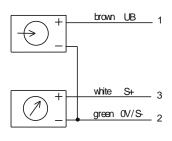


Three-wire system

plug according to DIN EN 175301-803 form A



cable outlet



E-004

Connection table for DIN plug or cable outlet

| | 420 mA | 010 VDC |
|-------------|----------|----------|
| | (2-wire) | (3-wire) |
| Supply: UB+ | 1 | 1 |
| Supply: 0V | 2 | 2 |
| Signal: S+ | | 3 |
| Signal: S- | - | 2 |

Order details

- 1. Model
- 2. Measuring range
- 3. Output signal
- 4. Options