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 ¼ 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 3.5 x, between 16 and 600 bar twice and for 1000 bar 1.5 x 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

Technical data

Model	P3296		Option
Pressure type	absolute pressure	positive gauge pressure	
Output signal	4...20 mA - 2-wire 1...5 VDC - 3-wire 1...6 VDC - 3-wire 0...10 VDC - 3-wire		
Accuracy	± 1 % of F.S. 1)		
Ranges according to EN	0 ... 1 bar to 0 ... 16bar	0 ... 16 bar to 0 ... 1000 bar	other ranges on request
Sensor element	piezoresistive	thin film	
Repeatability	≤ ± 0.1 % of F.S.		
Stability (annual)	≤ ± 0.3 % of F.S.in rated conditions		
Case	stainless steel 1.4301		
Pressure connection	G ¼ 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	10....30 VDC, (14...30 VDC for voltage output)		
Power consumption	output 4...20 mA: signal current output 0...20 mA: signal current + 4 mA voltage output: 8 mA		
Load	4…20 mA ≤ (UB [V] - 10V) / 0.020A 0...10 V ≥ 10 KΩ 1...5 V ≥ 5 KΩ 1...6 V ≥ 6 KΩ		
Temp. compens. range	0....80°C		
Temperature influence - zero point - measuring range	 ± 0.4 % / 10 K ± 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 - Medium - Ambient	 -30 .... 100 °C -40 .... 100 °C -30 .... 80 °C		
Weight	approx. 0.15 kg		

of F.S.= of full scale value

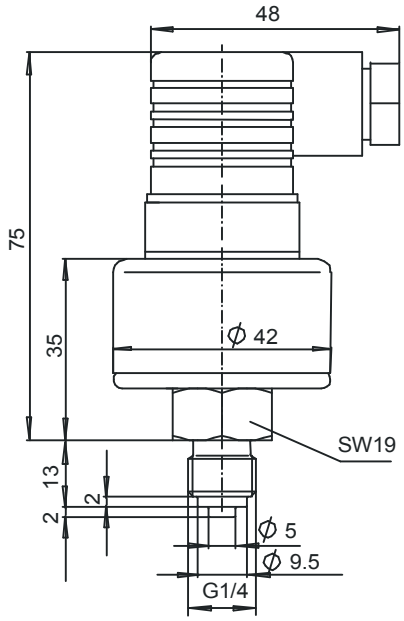
1) Terminal point adjustment

2) Declaration of conformity on request

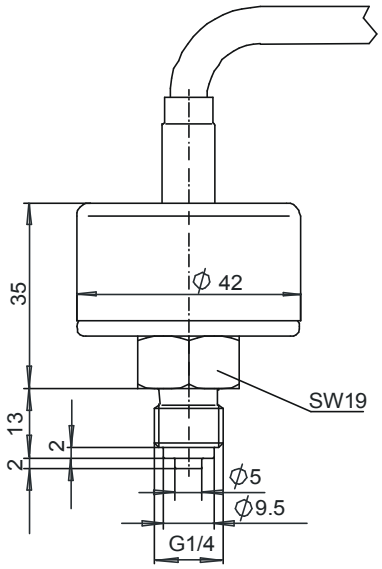
Dimensions

Case

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

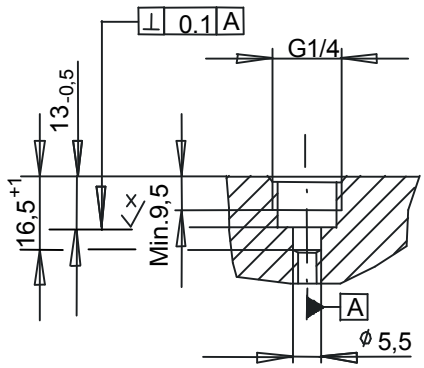


cable outlet



Screw-in aperture according to EN 837

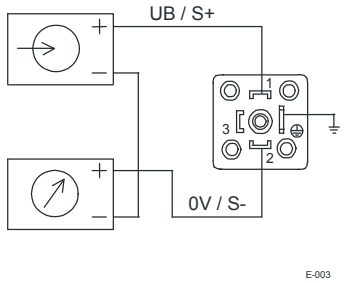
G 1/4



Electrical connection

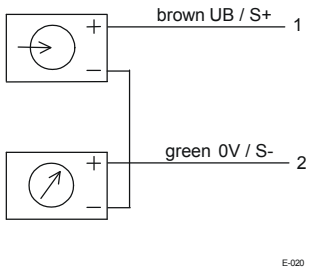
Two-wire system

plug according to DIN EN 175301-803 form A



E-003

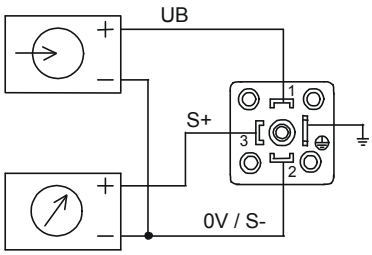
cable outlet



E-020

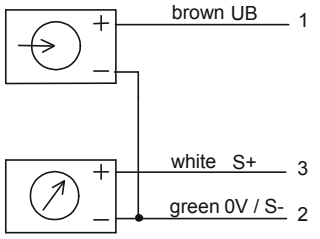
Three-wire system

plug according to DIN EN 175301-803 form A



E-004

cable outlet



E-022

Connection table for DIN plug or cable outlet

	4...20 mA (2-wire)	0...10 VDC (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

Subject to technical changes