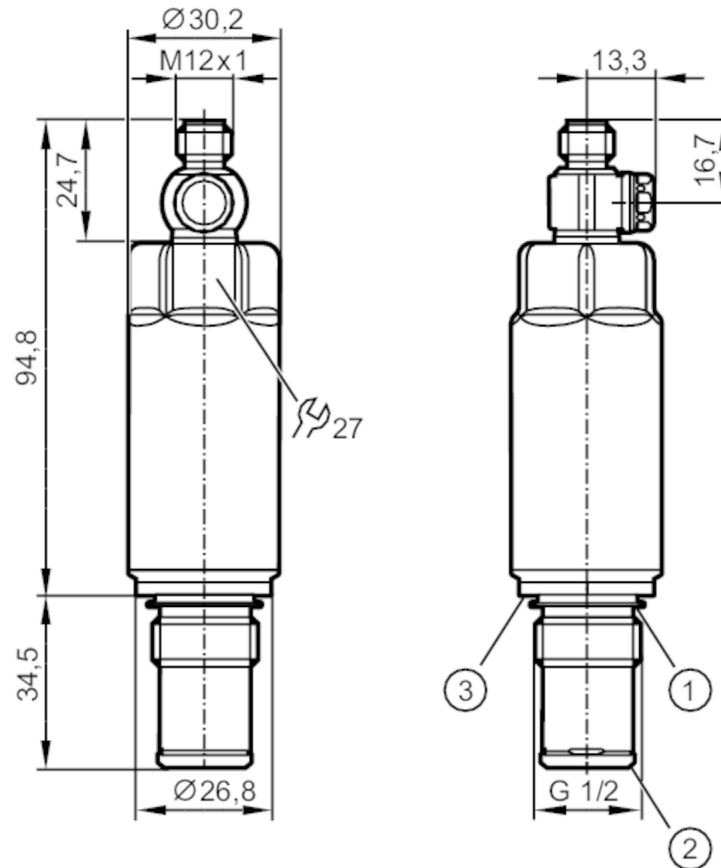


PM1506



Electronic pressure sensor

PM-2,5-REA12-A-ZVG/US



- 1 Gasket FKM (for sealing on the back - not pressure resistant) / removable
- 2 pre-mounted PEEK sealing ring (removable) / metallic sealing area
- 3 groove for sealing ring DIN 3869-21

ACS

 EC 1935/2004 EHEDG Certified

 Reg31

Product characteristics

| | | | |
|--------------------|--|-------------------|-----------------|
| Output signal | analogue signal; IO-Link | | |
| Measuring range | -125...2500 mbar | -1.82...36.26 psi | -12.5...250 kPa |
| Process connection | threaded connection G 1/2 external thread sealing cone | | |

Application

| | | | |
|--------------------------|---|---------|----------|
| Special feature | Gold-plated contacts | | |
| Measuring element | ceramic-capacitive pressure measuring cell | | |
| Application | food and beverage industry | | |
| Media | viscous media and liquids with suspended particles; liquids and gases | | |
| Medium temperature [°C] | -25...125; (< 1 h: 150) | | |
| Pressure rating | 30000 mbar | 435 psi | 3000 kPa |
| Min. bursting pressure | 50000 mbar | 725 psi | 5000 kPa |
| Vacuum resistance [mbar] | -1000 | | |
| Type of pressure | relative pressure | | |
| No dead space | yes | | |

PM1506



Electronic pressure sensor

PM-2,5-REA12-A-ZVG/US

| Electrical data | | | |
|------------------------------------|------------------------|---|-------------------|
| Operating voltage | [V] | 18...30 DC | |
| Min. insulation resistance | [MΩ] | 100; (500 V DC) | |
| Protection class | | III | |
| Reverse polarity protection | | yes | |
| Integrated watchdog | | yes | |
| 2-wire | | | |
| Current consumption | [mA] | 3.5...21.5 | |
| Power-on delay time | [s] | < 1 | |
| 3-wire | | | |
| Current consumption | [mA] | < 45 | |
| Power-on delay time | [s] | < 0.5 | |
| Outputs | | | |
| Total number of outputs | | 2 | |
| Output signal | | analogue signal; IO-Link | |
| Analogue current output | [mA] | 4...20; (scalable; 1:5) | |
| Max. load | [Ω] | 700; (U _b = 24 V; (U _b - 9 V) / 21.5 mA) | |
| Short-circuit proof | | yes | |
| Overload protection | | yes | |
| Measuring/setting range | | | |
| Measuring range | | -125...2500 mbar | -1.82...36.26 psi |
| Analogue start point | | -125...2000 mbar | -1.82...29 psi |
| Analogue end point | | 375...2500 mbar | 5.44...36.26 psi |
| In steps of | | 1 mbar | 0.02 psi |
| Factory setting | | ASP = 0.0 bar | AEP = 2500 mbar |
| | | | 0.1 kPa |
| | | | 37.5...250 kPa |
| Temperature monitoring | | | |
| Measuring range | [°C] | -25...150 | |
| Measuring range | [°F] | -13...302 | |
| Accuracy / deviations | | | |
| Repeatability | [% of the span] | < ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1) | |
| Characteristics deviation | [% of the span] | < ± 0,5 (DIN EN 61298-2); (incl. zero point and span error, non-linearity, hysteresis; Turn down 1:1) | |
| Linearity deviation | [% of the span] | < ± 0,15; (Turn down 1:1) | |
| Hysteresis deviation | [% of the span] | < ± 0,15; (Turn down 1:1) | |
| Long-term stability | [% of the span] | < ± 0,1; (Turn down 1:1; per year) | |
| Temperature coefficient zero point | [% of the span / 10 K] | < ± 0,1 (-25...85 °C); < ± 0,3 (85...150 °C) | |
| Temperature coefficient span | [% of the span / 10 K] | < ± 0,1 (-25...85 °C); < ± 0,3 (85...150 °C) | |

PM1506



Electronic pressure sensor

PM-2,5-REA12-A-ZVG/US

| | | |
|-------------------------------------|--|---|
| Temperature monitoring | | |
| Accuracy | [K] | $\pm 2.5 \text{ K} + (0.045 \times (\text{ambient temperature} - \text{medium temperature}))$ |
| Response times | | |
| Damping for the analogue output dAA | [s] | 0...4 |
| 2-wire | | |
| Step response time analogue output | [ms] | 30 |
| 3-wire | | |
| Step response time analogue output | [ms] | 7 |
| Temperature monitoring | | |
| Dynamic response T05 / T09 | [s] | < 10 / < 25; (DIN EN 60751 water; > 0,9 m/s) |
| Interfaces | | |
| Communication interface | | IO-Link |
| Transmission type | | COM2 (38,4 kBaud) |
| IO-Link revision | | 1.1 |
| SDCI standard | | IEC 61131-9 |
| IO-Link device ID | | 1024 d / 00 04 00 h |
| Profiles | | Smart Sensor ED2: Identification and Diagnosis (0x4000), Measurement Data Channel (0x800A) |
| SIO mode | | no |
| Required master port type | | A; (when pin 2 not connected: B) |
| Min. process cycle time | [ms] | 4.5 |
| IO-Link resolution pressure | [mbar] | 0.5 |
| IO-Link resolution temperature | [K] | 0.2 |
| IO-Link functions (cyclical) | function | bit length |
| | pressure | 16 |
| | temperature | 16 |
| | device status | 4 |
| IO-Link functions (acyclical) | application specific tag; internal temperature | |
| Operating conditions | | |
| Ambient temperature | [°C] | -25...80 |
| Storage temperature | [°C] | -40...100 |
| Protection | | IP 67; IP 68; IP 69K |
| Tests / approvals | | |
| EMC | | DIN EN 61326-1 |
| Shock resistance | | DIN EN 60068-2-27 |
| Vibration resistance | | DIN EN 60068-2-6 |
| MTTF | [years] | 322 |
| UL approval | UL Approval no. | J024 |
| | File number UL | E174189 |

PM1506



Electronic pressure sensor

PM-2,5-REA12-A-ZVG/US

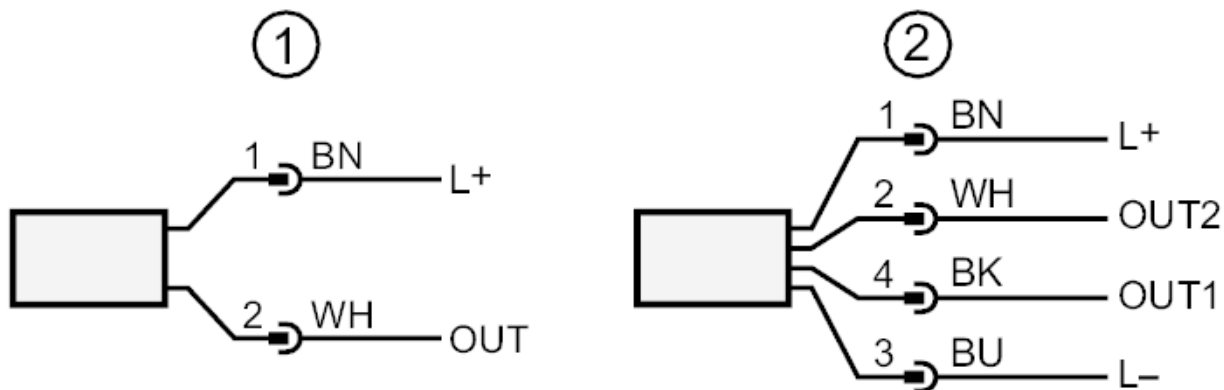
| Mechanical data | |
|--------------------------|--|
| Weight [g] | 252.2 |
| Materials | stainless steel (1.4404 / 316L); PTFE; FKM |
| Materials (wetted parts) | ceramics (99.9 % Al ₂ O ₃); PTFE; stainless steel (1.4435 / 316L); surface characteristics: Ra < 0,4 / Rz 4; PEEK |
| Min. pressure cycles | 100 million |
| Tightening torque [Nm] | 20 |
| Process connection | threaded connection G 1/2 external thread sealing cone |
| Remarks | |
| Pack quantity | 1 pcs. |

Electrical connection

Connector: 1 x M12; Contacts: gold-plated



Connection



- 1 connection for 2-wire operation (analogue)
 - 2 connection for 3-wire operation (analogue / IO-Link)
- OUT1: IO-Link
OUT2: analogue output