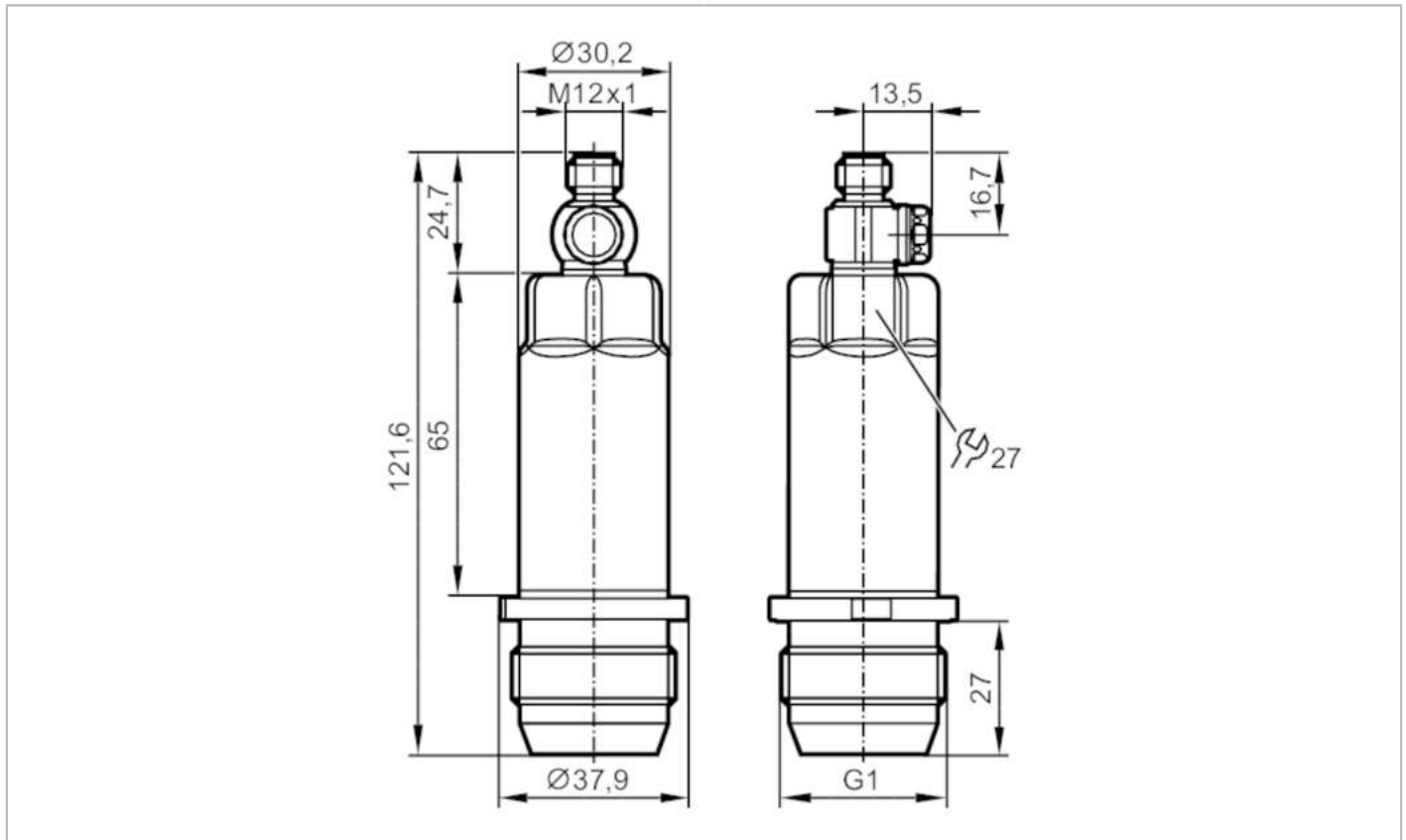


PM1606



Electronic pressure sensor

PM-2,5-REA01-E-ZVG/US



| Application | |
|--|---|
| Measuring element | ceramic-capacitive pressure measuring cell |
| Application | hygienic systems |
| Media | viscous media and liquids with suspended particles; liquids and gases |
| Medium temperature [°C] | -25...125; (150 max. 1h) |
| Pressure rating | 20000 mbar 290 psi 2000 kPa |
| Min. bursting pressure | 50000 mbar 725 psi 5000 kPa |
| Vacuum resistance [mbar] | -1000 |
| Type of pressure | relative pressure |
| No dead space | yes |
| MAWP (for applications according to CRN) [bar] | 20 |
| 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 |

PM1606



Electronic pressure sensor

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| | | | | |
|-------------------------------------|-------------------------------|--|-------------------|-----------------|
| 3-wire | | | | |
| Current consumption | [mA] | < 45 | | |
| Power-on delay time | [s] | 0.5 | | |
| Inputs / outputs | | | | |
| Number of inputs and outputs | Number of analogue outputs: 1 | | | |
| Outputs | | | | |
| Total number of outputs | 1 | | | |
| Output signal | analogue signal | | | |
| Number of analogue outputs | 1 | | | |
| Analogue current output | [mA] | 4...20; (scalable) | | |
| 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 | -0.125...2.5 bar | -125...2500 mbar | -1.82...36.26 psi | -12.5...250 kPa |
| Analogue start point | -125...2000 mbar | -1.82...29 psi | | -12.5...200 kPa |
| Analogue end point | -375...2500 mbar | 5.44...36.25 psi | | 37.5...250 kPa |
| In steps of | 1 mbar | 0.02 psi | | 0.1 kPa |
| Factory setting | ASP = 0.0 bar | AEP = 2500 mbar | | |
| Accuracy / deviations | | | | |
| Repeatability | [% of the span] | < ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1) | | |
| Characteristics deviation | [% of the span] | < ± 0,2 (nach DIN EN 61298-2); (incl. drift when overtightened, 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] | < ± 0,05; (0...70 °C) | | |
| Temperature coefficient span | [% of the span / 10 K] | < ± 0,15; (0...70 °C) | | |
| 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 | | |

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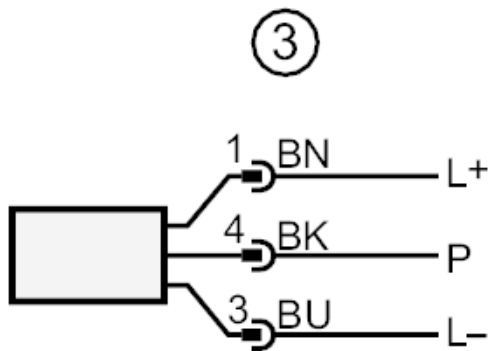
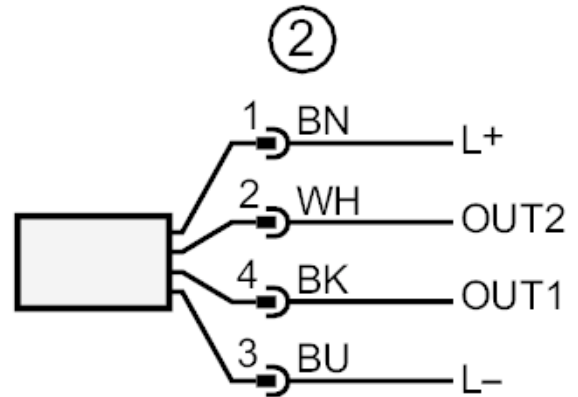
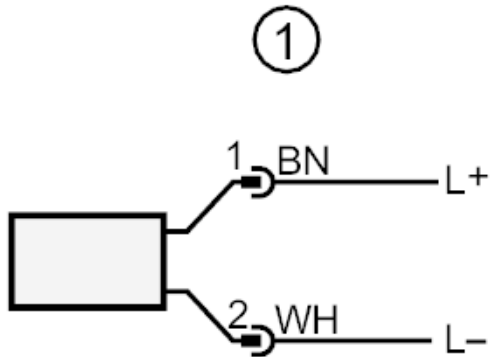
| Interfaces | | |
|---|--|---------------------|
| Communication interface | IO-Link | |
| Transmission type | COM2 (38,4 kBaud) | |
| IO-Link revision | 1.1 | |
| IO-Link device ID | 665 d / 00 02 99 h | |
| Profiles | Digital Measuring Sensor (0x000A), Identification and Diagnosis (0x4000) | |
| SIO mode | no | |
| Required master port type | A | |
| Process data analogue | 3 | |
| Min. process cycle time [ms] | 3.2 | |
| Operating conditions | | |
| Ambient temperature [°C] | -25...80 | |
| Storage temperature [°C] | -40...100 | |
| Protection | IP 67; IP 68; IP 69K | |
| Tests / approvals | | |
| EMC | DIN EN 61000-6-2 | |
| | DIN EN 61000-6-3 | |
| Shock resistance | DIN EN 60068-2-27 | 50 g (11 ms) |
| Vibration resistance | DIN EN 60068-2-6 | 20 g (10...2000 Hz) |
| MTTF [years] | 323 | |
| UL approval | UL Approval no. | J022 |
| Mechanical data | | |
| Weight [g] | 303 | |
| Materials | stainless steel (1.4404 / 316L); PBT | |
| Materials (wetted parts) | ceramics (99.9 % Al ₂ O ₃); PTFE; stainless steel (1.4435 / 316L); surface characteristics: Ra < 0,4 / Rz 4 | |
| Min. pressure cycles | 100 million | |
| Tightening torque [Nm] | 20; (recommended tightening torque depends on lubrication, seal and pressure rating) | |
| Process connection | threaded connection G 1 external thread sealing cone | |
| Displays / operating elements | | |
| Display unit | mbar; psi; kPa; mWS; inH ₂ O | |
| Remarks | | |
| Pack quantity | 1 pcs. | |
| Electrical connection | | |
| Connector: 1 x M12; Contacts: gold-plated | | |
|  | | |



Electronic pressure sensor

PM-2,5-REA01-E-ZVG/US

Connection



colours to DIN EN 60947-5-2

- 1 connection for 2-wire operation
- 2 connection for 3-wire operation
- 3 connection for IO-Link parameter setting (P = communication via IO-Link)

Core colours :

| | |
|------|-------|
| BK = | black |
| BN = | brown |
| BU = | blue |
| WH = | white |