

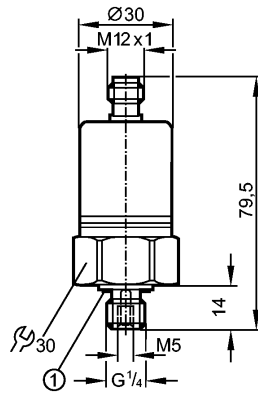


# PA3526

PA-2.5-RBG14-A-ZVG/US/ IV



Pressure sensors



1: sealing FPM / DIN 3869-14



### Product characteristics

Electronic pressure sensor

Quick disconnect

e1 compliant

Process connection: G 1/4 A / M5 I

Analog output

Measuring range: 0...2.5 bar

### Application

|                              |  |
|------------------------------|--|
| Application                  | Type of pressure: relative pressure<br>Liquids and gases |
| Pressure rating [bar]        | 20   |
| Bursting pressure min. [bar] | 50   |
| Medium temperature [°C]      | -25...90 ****)   |

### Electrical data

|                             |                  |
|-----------------------------|------------------|
| Electrical design           | DC               |
| Operating voltage [V]       | 9.6...32 DC 1)   |
| Insulation resistance [MΩ]  | > 100 (500 V DC) |
| Protection class            | III              |
| Reverse polarity protection | yes              |

### Outputs

|                     |   |
|---------------------|---|
| Output              | Analog output   |
| Output function     | 4...20 mA   |
| Overload protection | yes   |
| Max. load [Ω]       | (U <sub>b</sub> - 9.6 V) x 50; 720 at U <sub>b</sub> = 24 V |

### Measuring / setting range

|                       |         |
|-----------------------|---------|
| Measuring range [bar] | 0...2.5 |
|-----------------------|---------|

### Accuracy / deviations

|   |                                |
|---|--------------------------------|
| Accuracy / deviations<br>(in % of the span) |                                |
| Characteristics deviation *)                | < ± 0.25 (BFSL) / < ± 0.5 (LS) |
| Repeatability **)                           | < 0.1                          |
| Long-term stability ***)                    | < ± 0.05                       |

Temperature coefficients (TEMPCO) in the temperature range 0...80° C (in % of the span per 10 K)



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|                                   |         |
|-----------------------------------|---------|
| Greatest TEMPCO of the zero point | < ± 0.1 |
| Greatest TEMPCO of the span       | < ± 0.2 |

### Reaction times

|   |   |
|---|---|
| Step response time analogue output [ms] | 3 |
|---|---|

### Environment

|                          |           |
|--------------------------|-----------|
| Ambient temperature [°C] | -25...80  |
| Storage temperature [°C] | -40...100 |
| Protection               | IP 65     |

### Tests / approvals

|                      |   |
|----------------------|---|
| EMC                  | EN 61000-4-2 ESD: 4 kV CD / 8 kV AD<br>EN 61000-4-3 HF radiated: 30 V/m<br>EN 61000-4-4 Burst: 2 kV<br>EN 61000-4-6 HF conducted: 10 V<br>radiation of interference CISPR25 according to the automotive directive 2004/104/EC<br>noise immunity according to the automotive directive 2004/104/EC<br>ISO 11452-2 HF radiated: 100 V/m<br>ISO 7637-2 pulse: severity level 4 |
| Railway applications | DIN EN 50155 / IEC 60571 class T3, C1, S1   |
| Shock resistance     | DIN EN 60068-2-27 50 g (11 ms)<br>DIN EN 61373: Category 3  |
| Vibration resistance | DIN EN 60068-2-6 20 g (10...2000 Hz)<br>DIN EN 61373: Category 2  |
| MTTF [Years]         | 506   |

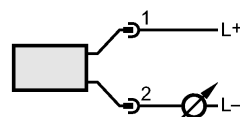
### Mechanical data

|                          |  |
|--------------------------|--|
| Process connection       | G ¼ A / M5 I   |
| Materials (wetted parts) | stainless steel (303S22); ceramics; sealing: FPM (Viton); according to DIN 3869-14 |
| Housing materials        | stainless steel 316L / 1.4404; FPM (Viton); PA; EPDM/X (Santoprene)                |
| Min. pressure cycles     | 100 million  |
| Weight [kg]              | 0.219  |

### Electrical connection

|            |                                     |
|------------|-------------------------------------|
| Connection | M12 connector; gold-plated contacts |
|------------|-------------------------------------|

#### Wiring



### Remarks

|         |   |
|---------|---|
| Remarks | *) BFSL = Best Fit Straight Line / LS = Limit Value Setting<br>**) with temperature fluctuations < 10 K<br>***) in % of value of measuring range / 6 months<br>****) -40...90 °C upon request |
|---------|---|

|                       |   |
|-----------------------|---|
| Pack quantity [piece] | 1 |
|-----------------------|---|