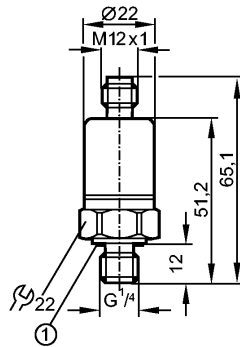


PT9554

PT-010-RBG14-B-DVG/US/ MW

Pressure sensors



1: FKM seal / DIN 3869-14
tightening torque 25 Nm



Product characteristics

Electronic pressure sensor

for mobile applications

e1 compliant

Process connection: G 1/4 A

Analog output

Measuring range: 0...10 bar

Application

| | |
|------------------------------|--|
| Application | Type of pressure: relative pressure Liquids and gases |
| Pressure rating [bar] | 25 |
| Bursting pressure min. [bar] | 300 |
| Medium temperature [°C] | -25...90 ****) |

Electrical data

| | |
|-----------------------------|-----------------|
| Electrical design | DC |
| Operating voltage [V] | 16...36 DC |
| Current consumption [mA] | < 6 |
| Insulation resistance [MΩ] | > 100 (80 V DC) |
| Protection class | III |
| Reverse polarity protection | yes |

Outputs

| | |
|-----------------|-----------------|
| Output | Analog output |
| Output function | 0...10 V analog |
| Analog output | 0...10 V |
| Max. load [Ω] | min. 2000 |

Measuring / setting range

| | |
|-----------------------|--------|
| Measuring range [bar] | 0...10 |
|-----------------------|--------|

Accuracy / deviations

| | |
|---|--------------------------------|
| Accuracy / deviations (in % of the span) | |
| Characteristics deviation *) | < ± 1.0 |
| Linearity | < ± 0.25 (BFSL) / < ± 0.5 (LS) |
| Hysteresis | < ± 0.2 |

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Pressure sensors

| | |
|--|---------|
| Repeatability **) | < ± 0.1 |
| Long-term stability ***) | < ± 0.1 |
| Temperature coefficients (TEMPCO) in the temperature range -25...90° C (in % of the span per 10 K) | |
| Greatest TEMPCO of the zero point | < ± 0.1 |
| Greatest TEMPCO of the span | < ± 0.1 |

Reaction times

| | |
|---|---|
| Step response time analogue output [ms] | 8 |
|---|---|

Environment

| | |
|--------------------------|----------------|
| Ambient temperature [°C] | -25...90 ****) |
| Storage temperature [°C] | -40...100 |
| Protection | IP 67 / IP 69K |

Tests / approvals

| | | |
|----------------------|--|---|
| EMC | EN 61000-4-2 ESD: noise immunity ISO 11452-2 ISO 11452-4 ISO 7637-2 radiation of interference EN 61000-6-1 EN 61000-6-4 | 4 kV CD / 8 kV AD according to the automotive directive 95/54/EC 04/104EC / 05/83EC 100 V/m 100 mA / severity level 4 severity level 4 according to CISPR 25 |
| Shock resistance | DIN IEC 68-2-27: | 50 g (11 ms) |
| Vibration resistance | DIN IEC 68-2-6: | 20 g (10...2000 Hz) |
| MTTF [Years] | | 1069 |

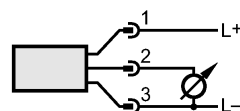
Mechanical data

| | |
|--------------------------|--|
| Process connection | G ¼ A |
| Materials (wetted parts) | stainless steel 316L / 1.4404; FPM (Viton) |
| Housing materials | stainless steel 316L / 1.4404; TROGAMID |
| Min. pressure cycles | 50 million |
| Weight [kg] | 0.083 |

Electrical connection

| | |
|------------|---------------|
| Connection | M12 connector |
|------------|---------------|

Wiring



Remarks

| | |
|---------|---|
| Remarks | *) incl. drift due to tightening torque, zero and span error **) with temperature fluctuations < 10 K ***) in% of the span / 6 months ****) -40...100°C upon request BFSL = Best Fit Straight Line / LS = Limit Value Setting |
|---------|---|

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



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Pressure sensors