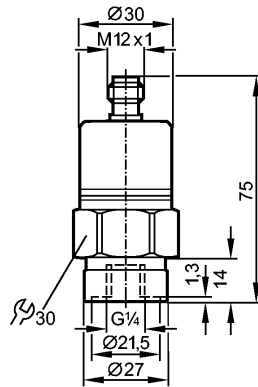


PA3023

PA-025-RBR14-A-ZVG/US/ IV

Pressure sensors



Product characteristics

Electronic pressure sensor

Quick disconnect

e1 compliant

Process connection: G 1/4 I

Analog output

Measuring range: 0...25 bar

Application

| | |
|------------------------------|--|
| Application | Type of pressure: relative pressure Liquids and gases |
| Pressure rating [bar] | 150 |
| Bursting pressure min. [bar] | 350 |
| 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 _b - 9.6 V) x 50; 720 at U _b = 24 V |

Measuring / setting range

| | |
|-----------------------|--------|
| Measuring range [bar] | 0...25 |
|-----------------------|--------|

Accuracy / deviations

| | |
|--|--------------------------------|
| Accuracy / deviations (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) | |
| Greatest TEMPCO of the zero point | 0.1 |

PA3023

PA-025-RBR14-A-ZVG/US/ /V

Pressure sensors

| | |
|-----------------------------|-----|
| 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 EN 61000-4-3 HF radiated: 30 V/m EN 61000-4-4 Burst: 2 kV EN 61000-4-6 HF conducted: 10 V radiation of interference according to the automotive directive 2004/104/EC CISPR25 noise immunity according to the automotive directive 2004/104/EC ISO 11452-2 HF radiated: 100 V/m 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) DIN EN 61373: Category 3 |
| Vibration resistance | DIN EN 60068-2-6 20 g (10...2000 Hz) DIN EN 61373: Category 2 |
| MTTF [Years] | 506 |

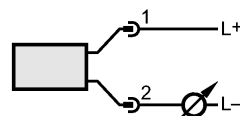
Mechanical data

| | |
|--------------------------|---|
| Process connection | G ¼ I |
| Materials (wetted parts) | stainless steel (303S22); ceramics; FPM (Viton) |
| Housing materials | stainless steel 316L / 1.4404; FPM (Viton); PA; EPDM/X (Santoprene) |
| Min. pressure cycles | 100 million |
| Weight [kg] | 0.223 |

Electrical connection

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

Wiring



Remarks

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

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