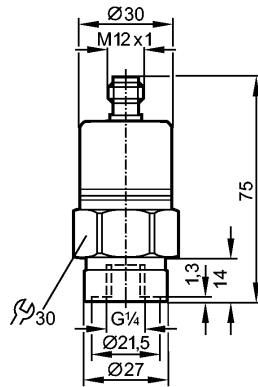


PA3024

PA-010-RBR14-A-ZVG/US/ IV

Pressure sensors



Made in Germany

Product characteristics

Electronic pressure sensor

Connector

Process connection: G $\frac{1}{4}$ I

e1 compliant

Analogue output

Measuring range: 0...10 bar

Application

Application

Type of pressure: relative pressure
Liquids and gases

Pressure rating [bar]

75

Bursting pressure min. [bar]

150

Medium temperature [°C]

-25...90 ****)

Electrical data

Electrical design

DC

Operating voltage [V]

9.6...32 DC ¹⁾

Insulation resistance [M Ω]

> 100 (500 V DC)

Protection class

III

Reverse polarity protection

yes

Outputs

Output

Analogue 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...10

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

PA3024

PA-010-RBR14-A-ZVG/US/ IV

Pressure sensors

Greatest TEMPCO of the span	0.2
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Reaction times

Step response time analogue output [ms]	3
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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

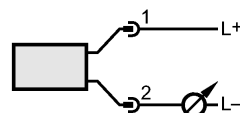
Mechanical data

Process connection	G¼ 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
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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
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Pack quantity [piece]	1
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