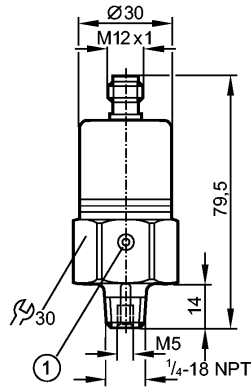


PX9114

PA-010PRBN14-B-DVG/US/ IV

Pressure sensors



1: ventilation



Product characteristics

Electronic pressure sensor

e1 compliant

Process connection: 1/4" NPT A / M5 I

Analog output

Measuring range: 0...100 psi

Application

Application: Type of pressure: relative pressure
Liquids and gases

Pressure rating [psi]	1087
Bursting pressure min. [psi]	2175
Medium temperature [°C]	-25...90

Electrical data

Electrical design	DC
Operating voltage [V]	16...32 DC
Current consumption [mA]	< 18
Insulation resistance [MΩ]	> 100 (500 V DC)
Protection class	III
Reverse polarity protection	yes

Outputs

Output	Analog output
Output function	0...10 V analog
Overload protection	yes
Analog output	0...10 V
Max. load [Ω]	min. 2000

Measuring / setting range

Measuring range [psi]	0...100
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Accuracy / deviations

Accuracy / deviations (in % of the span)	
Characteristics deviation *)	< ± 0.35 (BFSL) / < ± 0.75 (LS)
Repeatability **)	< 0.15
Long-term stability ***)	< ± 0.05

PX9114

PA-010PRBN14-B-DVG/US/ IV

Pressure sensors

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

Greatest TEMPCO of the zero point	0.2
Greatest TEMPCO of the span	0.3

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 according to the automotive directive 2004/104/EC / ISO
	noise immunity HF radiated	11452-2 100 V/m according to ISO7637-2 / severity level 3
	pulse resistance	
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]		531

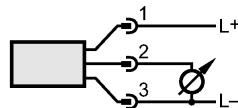
Mechanical data

Process connection	¼" NPT A / M5 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]	0.217

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
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Pack quantity [piece]	1
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