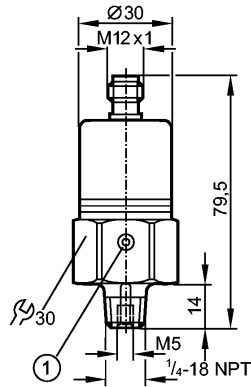


PX9116

PA-003PRBN14-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...30 psi

Application

Application: Type of pressure: relative pressure
Liquids and gases

Pressure rating [psi]: 290

Bursting pressure min. [psi]: 725

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...30

Accuracy / deviations

Accuracy / deviations (in % of the span)

Characteristics deviation *) < ± 0.35 (BFSL) / < ± 0.75 (LS)

Repeatability **) < 0.15

Long-term stability ***) < ± 0.05

PX9116

PA-003PRBN14-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
---	---

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 11452-2
	noise immunity HF radiated	100 V/m according to ISO7637-2 / severity level 3
Shock resistance	DIN IEC 68-2-27:	50 g (11 ms)
Vibration resistance	DIN IEC 68-2-6:	20 g (10...2000 Hz)

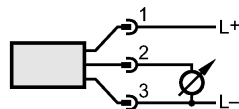
Mechanical data

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]	0.21

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
---------	---

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