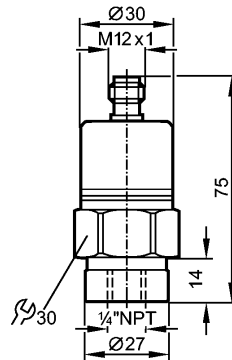


PA3227

PA-001-RBN14-A-ZVG/US/ IV

Pressure sensors



Product characteristics

Electronic pressure sensor

Quick disconnect

e1 compliant

Process connection: 1/4" NPT I

Analog output

Measuring range: 0...1 bar / 0...14.5 psi

Application

Application	Type of pressure: relative pressure Liquids and gases	
Pressure rating	10 bar	145 psi
Bursting pressure min.	30 bar	435 psi
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]	(Ub - 9.6 V) x 50; 720 at Ub = 24 V	

Measuring / setting range

Measuring range	0...1 bar	0...14.5 psi
-----------------	-----------	--------------

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	

PA3227

PA-001-RBN14-A-ZVG/US/ IV

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	¼" NPT 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]	0.228

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