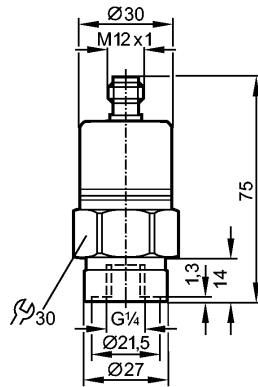


**PA9029**

PA-0-1-RBR14-B-DVG/US/ IV

Pressure sensors



**Product characteristics**

Electronic pressure sensor  
 Quick disconnect  
 e1 compliant  
 Process connection: G ¼ I  
 Analog output  
 Measuring range: -1...0 bar

**Application**

Application	Type of pressure: relative pressure Liquids and gases
Pressure rating [bar]	10
Bursting pressure min. [bar]	30
Medium temperature [°C]	-25...90 ****)

**Electrical data**

Electrical design	DC
Operating voltage [V]	16...32 DC 1)
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
Overload protection	yes
Min. load [Ω]	2000

**Measuring / setting range**

Measuring range [bar]	-1...0
-----------------------	--------

**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)

**PA9029**

PA-0-1-RBR14-B-DVG/US/ /V

**Pressure sensors**

Greatest TEMPCO of the zero point	0.1
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 CISPR25	according to the automotive directive 2004/104/EC
	noise immunity 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 DIN EN 61373:	50 g (11 ms) Category 3
Vibration resistance	DIN EN 60068-2-6 DIN EN 61373:	20 g (10...2000 Hz) Category 2
MTTF [Years]		478

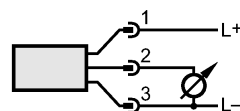
**Mechanical data**

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

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