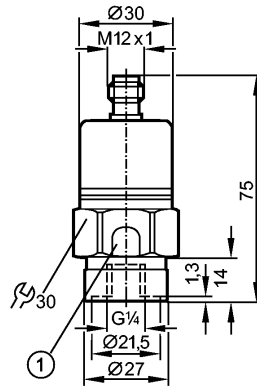


**PA9020**

PA-400-SBR14-B-DVG/US/V

Pressure sensors



**Product characteristics**

Electronic pressure sensor  
 Quick disconnect  
 e1 compliant  
 Process connection: G ¼ I  
 Analog output  
 Measuring range: 0...400 bar

**Application**

Application	Type of pressure: relative pressure Liquids and gases Use in gases at pressures > 25 bar only after contacting the manufacturer ifm
Pressure rating [bar]	600
Bursting pressure min. [bar]	1000
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
Overload protection	yes
Min. load [Ω]	2000

**Measuring / setting range**

Measuring range [bar]	0...400
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**Accuracy / deviations**

Accuracy / deviations (in % of the span)	
Characteristics deviation *)	< ± 0.25 (BFSL) / < ± 0.5 (LS)
Repeatability **)	< 0.1
Long-term stability ***)	< ± 0.05

**PA9020**

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**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	0.1
Greatest TEMPCO of the span	0.2

**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 68 / IP 69K

**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 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]	478

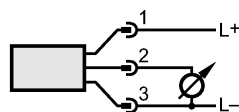
**Mechanical data**

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]	0.235

**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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**Pressure sensors**