

New generation available: PN7097

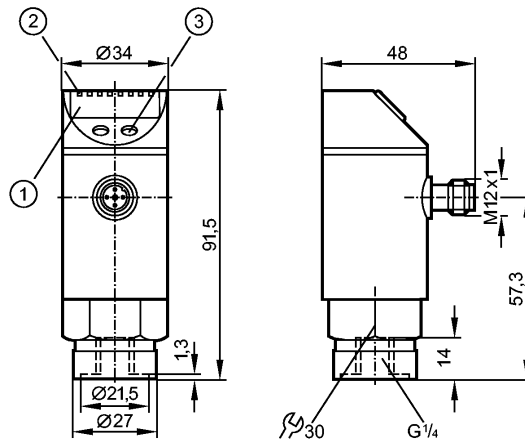
efectorsoo

PN5007



PN-001BRBR14-HFPKG/US/ IV

Pressure sensors



- 1: 4-digit alphanumeric display
- 2: LEDs (display unit / switching status)
- 3: Programming button



Product characteristics

Electronic pressure monitor

Quick disconnect

Function programmable

Process connection: G 1/4 I

1 switching output

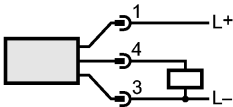
4-digit alphanumeric display

Measuring range: 0...1000 mbar / 0...14.5 psi

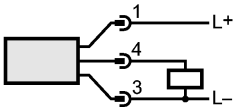
Application

Application	Type of pressure: relative pressure Liquids and gases	
Pressure rating	10000 mbar	145 psi
Bursting pressure min.	30000 mbar	450 psi
Medium temperature [°C]	-25...80	
Electrical data	DC PNP	
Electrical design	DC PNP	
Operating voltage [V]	18...36 DC 1)	
Current consumption [mA]	< 50	
Insulation resistance [MΩ]	> 100 (500 V DC)	
Protection class	III	
Reverse polarity protection	yes	
Overvoltage protection [V]	up to 40 V	
Outputs	1 switching output	
Output	normally open / closed programmable	
Output function	normally open / closed programmable	
Current rating [mA]	250	
Voltage drop [V]	< 2	
Short-circuit protection	yes (non-latching)	
Switching frequency [Hz]	≤ 170	
Measuring / setting range	mbar, kPa, psi, inHg	
Display unit	mbar, kPa, psi, inHg	
Measuring range	0...1000 mbar	0...14.5 psi
Setting range		

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Set point, SP	10...1000 mbar	0.2...14.5 psi
Reset point, rP	5...995 mbar	0.1...14.4 psi
in steps of	5 mbar	0.1 psi
Accuracy / deviations		
Accuracy / deviations (in % of the span)		
Switch point accuracy	< ± 0.5	
Characteristics deviation *)	< ± 0.25 (BFSL) / < ± 0.5 (LS)	
Hysteresis	< ± 0.25	
Repeatability **)	< ± 0.1	
Long-term stability ***)	< ± 0.05	
Temperature coefficients (TEMPCO) in the temperature range -20...80° C (in % of the span per 10 K)		
Greatest TEMPCO of the zero point	0.2	
Greatest TEMPCO of the span	0.2	
Reaction times		
Power-on delay time [s]	0.3	
Delay time programmable dS, dr [s]	0; 0.2...50	
Integrated watchdog	yes	
Software / programming		
Programming options	hysteresis / window function; N.O. / N.C; on delay, off delay; damping; display unit	
Environment		
Ambient temperature [°C]	-20...80 (UB < 32 V) / -20...60 (UB > 32 V)	
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: 10 V/m EN 61000-4-4 Burst: 2 kV EN 61000-4-5 Surge: 0.5/1 kV EN 61000-4-6 HF conducted: 10 V	
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]	231	
Mechanical data		
Process connection	G ¼ I	
Materials (wetted parts)	stainless steel (303S22); ceramics; FPM (Viton)	
Housing materials	stainless steel (304S15); stainless steel 316L / 1.4404; PC (Makrolon); PBT (Pocan); PEI; FPM (Viton); PTFE	
Switching cycles min.	100 million	
Weight [kg]	0.259	
Displays / operating elements		
Display	Display unit 4 x LED green Switching status LED yellow Function display 4-digit alphanumeric display Measured values 4-digit alphanumeric display	
Electrical connection		
Connection	M12 connector; gold-plated contacts	
Wiring		
Remarks		
Remarks	1) to EN50178, SELV, PELV	

Wiring



Remarks

Remarks

1) to EN50178, SELV, PELV

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*) 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]

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