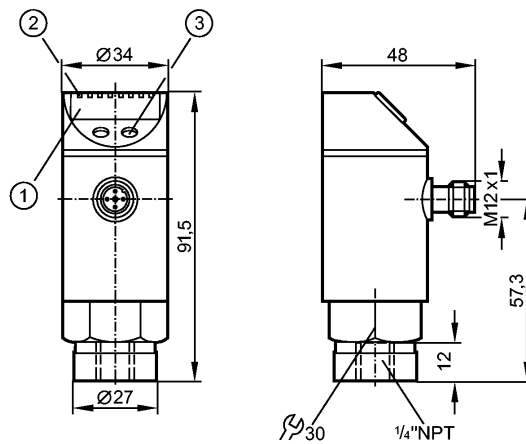


PN5207

PN-001BRBN14-HFPKG/US/ IV

Pressure sensors

New generation available: PN7297



- 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: 1/4" NPT
1 switching output
4-digit alphanumeric display
Measuring range: 0...14.5 psi / 0...1000 mbar

Application

Application	Type of pressure: relative pressure Liquids and gases	
Pressure rating	145 psi	10000 mbar
Bursting pressure min.	450 psi	30000 mbar
Medium temperature [°C]	-25...80	

Electrical data

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

Output	1 switching output
Output function	normally open / closed programmable
Current rating [mA]	250
Voltage drop [V]	< 2
Short-circuit protection	yes (non-latching)
Switching frequency [Hz]	≤ 170

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Pressure sensors

Measuring / setting range		
Display unit	mbar, kPa, psi, inHg	
Measuring range	0...14.5 psi	0...1000 mbar
Setting range		
Set point, SP	0.2...14.5 psi	10...1000 mbar
Reset point, rP	0.1...14.4 psi	5...995 mbar
in steps of	0.1 psi	5 mbar
Factory setting	SP1 = 3.6 psi; rP1 = 3.3 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	¼" NPT	
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]	0.262	
Displays / operating elements		

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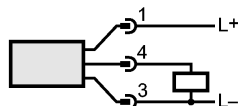
Pressure sensors

Display	Display unit 4 x LED green Switching status LED yellow Function display 4-digit alphanumeric display Measured values 4-digit alphanumeric display
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Electrical connection

Connection	M12 connector; gold-plated contacts
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Wiring



Remarks

Remarks	1) to EN50178, SELV, PELV *) BFSL = Best Fit Straight Line / LS = Limit Value Setting **) with temperature fluctuations < 10 K ***) in % of value of measuring range / 6 months
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Pack quantity	[piece]	1
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