

New generation available: PN7292

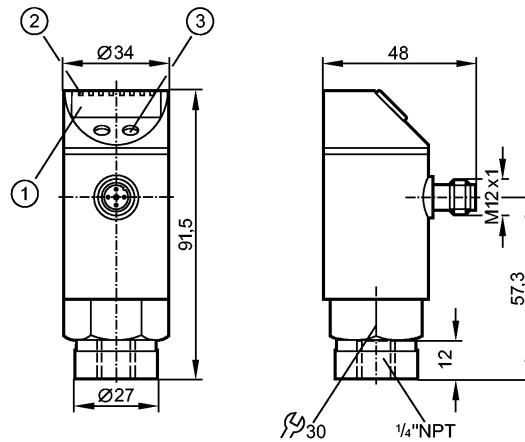
efectorsoo

PN5202



PN-100-SBN14-HFPKG/US/ V

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: 1/4" NPT

1 switching output

4-digit alphanumeric display

Measuring range: 0...1450 psi / 0...100 bar / 0...10 MPa

Application

Application

Type of pressure: relative pressure

Liquids and gases

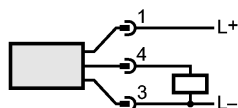
Use in gases at pressures > 363 psi (25 bar) only after contacting the manufacturer ifm

Pressure rating	4350 psi	300 bar	30 MPa
Bursting pressure min.	9400 psi	650 bar	65 MPa
Medium temperature [°C]	-25...80		
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 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	0...1450 psi / 0...100 bar / 0...10 MPa		
Measuring range	0...1450 psi	0...100 bar	0...10 MPa

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Setting range			
Set point, SP	20...1450 psi	1.0...100.0 bar	0.10...10.00 MPa
Reset point, rP	10...1440 psi	0.5...99.5 bar	0.05...9.95 MPa
in steps of	10 psi	0.5 bar	0.05 MPa
Factory setting	SP1 = 360 psi; rP1 = 330 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 67		
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)		
Switching cycles min.	100 million		
Weight [kg]	0.263		
Displays / operating elements			
Display	Display unit 3 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



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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

Pack quantity [piece]

1

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