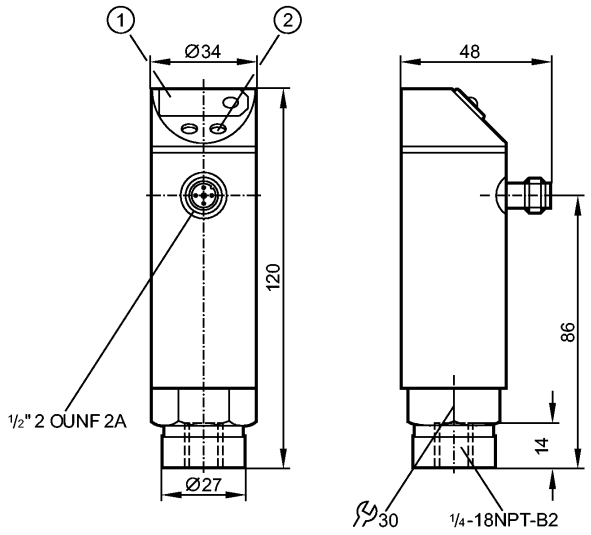
efectorsoo
PN4224

PN-010-RBN14-HFBOW/LS/ /V

Pressure sensors



1: 7-segment LED display
2: Programming button

Product characteristics

Electronic pressure monitor				
Quick disconnect				
Function programmable				
Process connection: ¼" NPT I				
Switching output				
7-segment LED display				
Measuring range: 0...10 bar / 0...145 psi / 0...1000 kPa				
Application				
Application		Type of pressure: relative pressure Liquids and gases		
Pressure rating		75 bar	1088 psi	7500 kPa
Bursting pressure min.		150 bar	2175 psi	15000 kPa
Medium temperature	[°C]	-25...80		
Electrical data				
Electrical design		AC / triac		
Operating voltage	[V]	85...265 AC		
Nominal voltage	[V]	90...250 AC (45...65 Hz)		
Voltage tolerance	[%]	-5 / +10		
Current consumption	[mA]	< 10		
Insulation resistance	[MΩ]	> 100 (500 V DC)		
Protection class		II		
Reverse polarity protection		no		
Outputs				
Output		Switching output		
Output function		normally open / closed programmable		
Current rating	[mA]	250; (...70 °C); 1000 (...60 °C); 1500 (...45 °C); 2500 (...20 °C)		
Voltage drop	[V]	< 2		
Short-circuit proof		no		
Overload protection		no		
Switching frequency	[Hz]	≤ 160		
Measuring / setting range				

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Measuring range		0...10 bar	0...145 psi	0...1000 kPa
Setting range				
Set point, SP		0.10...9.99 bar	1...145 psi	10...999 kPa
Reset point, rP		0.05...9.95 bar	1...144 psi	5...994 kPa
in steps of		0.01 bar	1 psi	1 kPa
Accuracy / deviations				
Accuracy / deviations (in % of the span)				
Switch point accuracy		< ± 1.0		
Linearity		< ± 0.5		
Hysteresis		< ± 0.1		
Repeatability **)		< ± 0.1		
Long-term stability ***)		< ± 0.1		
Temperature coefficients (TEMPCO) in the temperature range -25...80° C (in % of the span per 10 K)				
Greatest TEMPCO of the zero point		< ± 0.2		
Greatest TEMPCO of the span		< ± 0.3		
Reaction times				
Power-on delay time	[s]	0.2		
Delay time programmable dS, dr	[s]	0, 0.2,...10, 11,...50		
Damping for the switching output (dAP)	[s]	0...4		
Integrated watchdog		yes		
Software / programming				
Programming options		hysteresis / window function; N.O. / N.C; on delay, off delay; damping; calibration of displayed values; display can be rotated / deactivated; display unit		
Adjustment of the switch point		Programming button		
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: 10 V/m EN 61000-4-4 Burst: 2 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]	224.58		
Mechanical data				
Process connection		¼" NPT I		
Materials (wetted parts)		stainless steel (303S22); ceramics; FPM (Viton)		
Housing materials		stainless steel (304S15); PC (Makrolon); PBT (Pocan); PA; FPM (Viton)		
Switching cycles min.		100 million		
Weight	[kg]	0.381		
Displays / operating elements				
Display		Switching status LED red Function display 7-segment LED display Measured values 7-segment LED display		
Electrical connection				
Connection		1/2" UNF-Connector		
Wiring				

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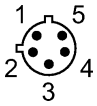
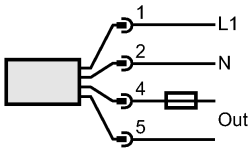
Programming of the output function:
Hno = hysteresis / N.O.
Hnc = hysteresis / N.C.
Fno = window function / N.O.
Fnc = window function / N.C.





Note: miniature fuse to IEC60127-2 sheet 1,
≤ 5 A (fast acting)

Remarks

Remarks	n.c. = not connected **) with temperature fluctuations < 10 K ***) in % of the span per year Recommendation: check the unit for reliable function after a short circuit.
Pack quantity [piece]	1