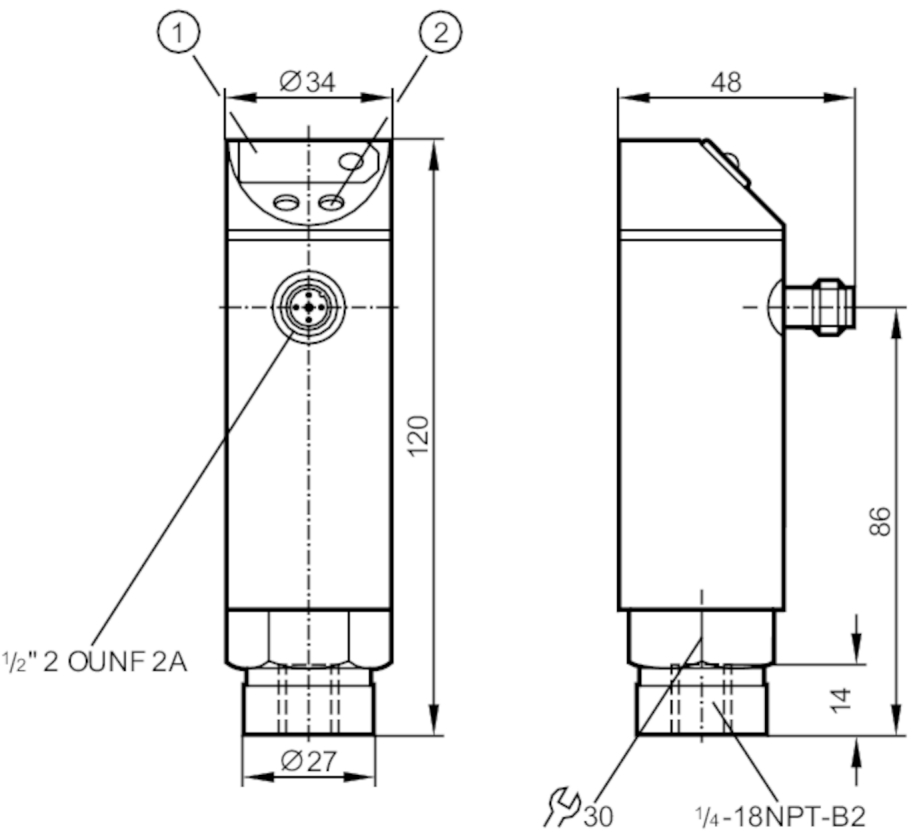


PN4227



Pressure sensor with display

PN-001BRBN14-HFBOW/LS/ IV



- 1 7-segment LED display
- 2 Programming button



Product characteristics				
Number of inputs and outputs	Number of digital outputs: 1			
Measuring range	0...1 bar	0...1000 mbar	0...14.5 psi	0...100 kPa
Process connection	threaded connection 1/4" NPT Internal thread			
Application				
Application	for industrial applications			
Media	liquids and gases			
Medium temperature [°C]	-25...80			
Min. bursting pressure	30000 mbar	430 psi	3000 kPa	
Pressure rating	10000 mbar	145 psi	1000 kPa	
Type of pressure	relative pressure			
Electrical data				
Operating voltage tolerance [%]	5...10			
Operating voltage [V]	90...250 AC			
Nominal voltage AC [V]	< 250			
Current consumption [mA]	< 10			
Min. insulation resistance [MΩ]	100; (500 V DC)			
Protection class	II			



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Reverse polarity protection	no
Power-on delay time [s]	0.2
Integrated watchdog	yes

Inputs / outputs

Number of inputs and outputs	Number of digital outputs: 1
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Outputs

Total number of outputs	1
Output signal	switching signal
Electrical design	Triac
Number of digital outputs	1
Output function	normally open / closed; (configurable)
Max. voltage drop switching output AC [V]	2
Permanent current rating of switching output AC [mA]	250; ((...70 °C) 1000 (...60 °C) 1500 (...45 °C) 2500 (...20 °C))
Switching frequency AC [Hz]	< 160
Short-circuit proof	no
Overload protection	no

Measuring/setting range

Measuring range	0...1 bar	0...1000 mbar	0...14.5 psi	0...100 kPa
Set point SP	10...999 mbar	0.1...14.6 psi	1...99.9 kPa	
Reset point rP	5...994 mbar	0.1...14.5 psi	0.5...99.4 kPa	
In steps of	1 mbar	0.1 psi	0.1 kPa	

Accuracy / deviations

Switch point accuracy [% of the span]	< ± 1,0
Repeatability [% of the span]	< ± 0,1; (with temperature fluctuations < 10 K)
Linearity deviation [% of the span]	< ± 0,5
Hysteresis deviation [% of the span]	< ± 0,1
Long-term stability [% of the span]	< ± 0,1; (per year)
Temperature coefficient zero point [% of the span / 10 K]	< ± 0,2; (-25...80 °C)
Temperature coefficient span [% of the span / 10 K]	< ± 0,3; (-25...80 °C)

Reaction times

Delay time programmable dS, dr [s]	0, 0,2,...10, 11,...50
Damping process value dAP [s]	0...4

Software / programming

Adjustment of the switch point	Programming button
Parameter setting options	hysteresis / window; normally open / closed; switch-on/switch-off delay; Damping; adaptation of displayed values; display can be rotated and switched off; Display unit

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Operating conditions		
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
Pressure equipment directive	sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	

Mechanical data		
Weight	[g]	356.65
Housing		tubular
Dimensions	[mm]	Ø 34 / L = 120
Material		stainless steel (1.4301 / 304); PC; PBT; PA; FKM
Materials (wetted parts)		stainless steel (1.4305 / 303); ceramics; FKM
Min. pressure cycles		100 million
Process connection		threaded connection 1/4" NPT Internal thread
Restrictor element integrated		no (can be retrofitted)

Displays / operating elements		
Display	Switching status	LED, red
	Function display	7-segment LED display
	Measured values	7-segment LED display

Electrical connection	
Required protection	miniature fuse to IEC60127-2 sheet 1; ≤ 5 A; fast acting

Remarks	
Remarks	n.c. = not used
Pack quantity	1 pcs.

Electrical connection	
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Connector: 1 x 1/2"; coding: C



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Connection



Note miniature fuse to IEC60127-2 sheet 1 ≤ 5 A fast acting