

PN4227



Pressure sensor with display

PN-001BRBN14-HFBOW/LS/ IV



- 1 7-segment LED display
- 2 programming button



Application

Media	liquids and gases		
Medium temperature [°C]	-25...80		
Pressure rating	10000 mbar	145 psi	1000 kPa
Min. bursting pressure	30000 mbar	430 psi	3000 kPa
Type of pressure	relative pressure		

Electrical data

Operating voltage tolerance [%]	5...10
Operating voltage [V]	85...265 AC
Nominal voltage AC [V]	< 250
Current consumption [mA]	< 10
Min. insulation resistance [MΩ]	100; (500 V DC)
Protection class	II
Reverse polarity protection	no
Power-on delay time [s]	0.2
Integrated watchdog	yes



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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 / normally closed; (parameterisable)		
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...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)		
Response times			
Delay time programmable dS, dr [s]	0, 0,2,...10, 11,...50		
Damping for the switching output dAP [s]	0...4		
Software / programming			
Adjustment of the switch point	programming button		
Parameter setting options	hysteresis / window; normally open / normally closed; switch-on/switch-off delay; Damping; adaptation of displayed values; display can be rotated and switched off; Display unit		
Operating conditions			
Ambient temperature [°C]	-25...80		
Storage temperature [°C]	-40...100		
Protection	IP 65		

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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		
Weight	[g]	382.6
Materials	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	

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

Connector: 1 x 1/2"



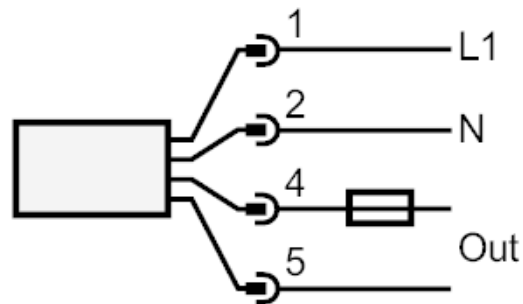
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Connection



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