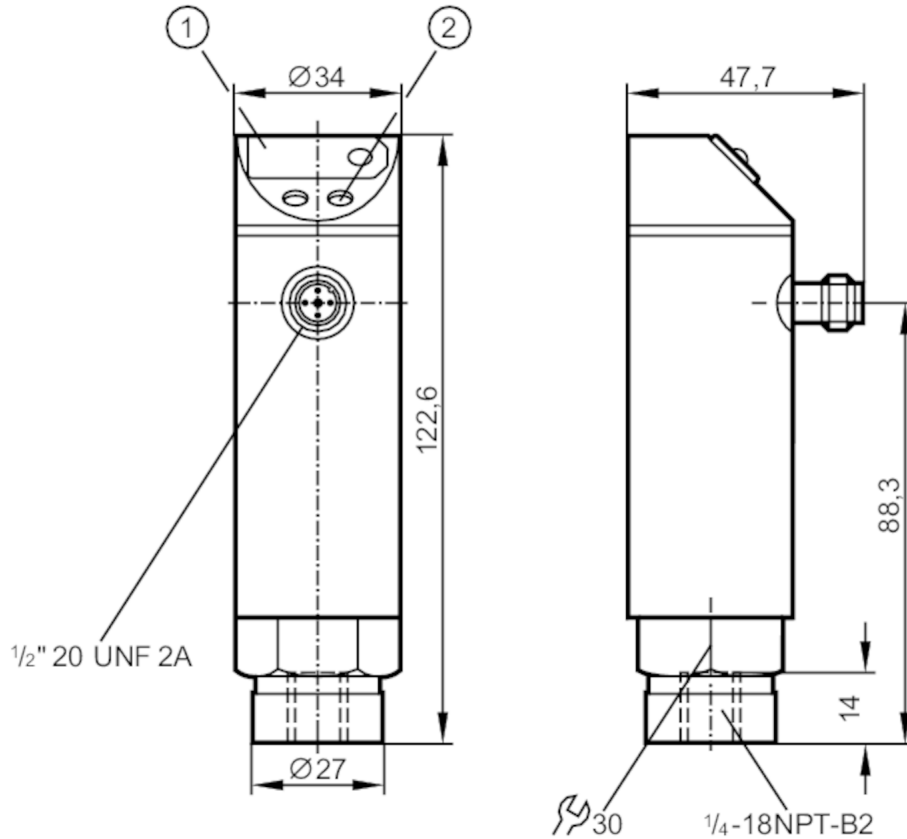


# PN4220



## Pressure sensor with display

PN-400-SBN14-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...400 bar	0...5800 psi	0...40 MPa
Process connection	threaded connection 1/4" NPT internal thread		

### Application

Application	for industrial applications		
Media	liquids and gases		
Conditionally suitable for	use in gases at pressures > 25 bar only on request		
Medium temperature [°C]	-25...80		
Min. burst pressure	1000 bar	14500 psi	100 MPa
Pressure rating	600 bar	8700 psi	60 MPa
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)		

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## Pressure sensor with display

PN-400-SBN14-HFBOW/LS/ IV

Protection class	II
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 / 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...400 bar	0...5800 psi	0...40 MPa
Set point SP	4...400 bar	60...5800 psi	0.4...40 MPa
Reset point rP	2...398 bar	30...5770 psi	0.2...39.8 MPa
In steps of	1 bar	10 psi	0.1 MPa

### 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 process value dAP [s]	0...4

### Software / programming

Adjustment of the switch point	programming button
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## Pressure sensor with display

PN-400-SBN14-HFBOW/LS/ /V

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
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### Operating conditions

Ambient temperature	[°C]	-25...80
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 61000-4-6 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]	367.15
Materials	stainless steel (304/1.4301); PC; PBT; PA; FKM	
Materials (wetted parts)	stainless steel (303/1.4305); ceramics; FKM	
Min. pressure cycles	100 million	
Process connection	threaded connection 1/4" NPT internal thread	
Restrictor element integrated	yes	

### 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
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### Remarks

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

### Electrical connection

Connector: 1 x 1/2"; coding: C; Contacts: 5



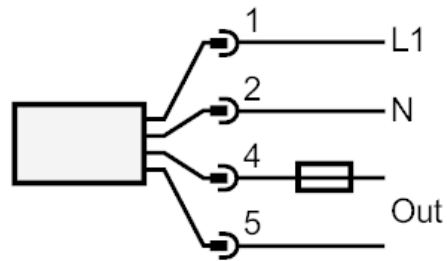
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## Pressure sensor with display

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### Connection



Note miniature fuse to IEC60127-2 sheet 1  $\leq 5$  A fast acting