

1: 7-segment LED display  
2: Programming button



Product characteristics  
Electronic pressure monitor

Quick disconnect

Function programmable

Process connection: 1/4" NPT I

Switching output

7-segment LED display

Measuring range: 0...400 bar / 0...5800 psi / 0...40 MPa

Application

Application

Type of pressure: relative pressure

Liquids and gases

Use in gases at pressures > 25 bar only after contacting the manufacturer ifm

Pressure rating	600 bar	8700 psi	60 MPa
Bursting pressure min.	1000 bar	14500 psi	100 MPa
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]

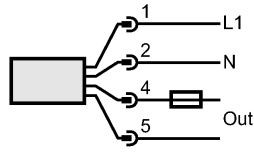
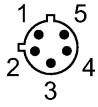
≤ 160

**PN4220 - Electronic pressure monitor - eclass: 27201302 / 27-20-13-02**

Measuring / setting range			
Measuring range	0...400 bar	0...5800 psi	0...40 MPa
Setting range			
Set point, SP	4...400 bar	60...5800 psi	0.4...40.0 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			
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 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		
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]	0.389		
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		
<b>Wiring</b>			

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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