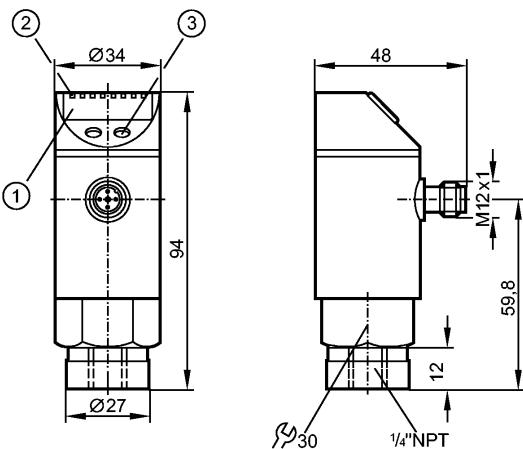


**PN5200**

PN-400-SBN14-HFFKG/US/ /V

Pressure sensors

New generation available: PN7270



1: 4-digit alphanumeric display

2: LEDs (display unit / switching status)

3: Programming button

**Product characteristics**

Electronic pressure monitor

Quick disconnect

Function programmable

Process connection: 1/4" NPT

1 switching output

4-digit alphanumeric display

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

**Application**

Application

Type of pressure: relative pressure

Liquids and gases

Use in gases at pressures > 363 psi (25 bar) only after contacting the manufacturer  
ifm

Pressure rating

8700 psi

600 bar

60 MPa

Bursting pressure min.

14500 psi

1000 bar

100 MPa

Medium temperature

[°C]

-25...80

**Electrical data**

Electrical design

DC PNP

Operating voltage [V]

18...36 DC<sup>1)</sup>

Current consumption [mA]

&lt; 50

Insulation resistance [MΩ]

&gt; 100 (500 V DC)

Protection class

III

Reverse polarity protection

yes

Overvoltage protection [V]

up to 40 V

**Outputs**

Output

1 switching output

Output function

normally open / closed programmable

Current rating [mA]

250

Voltage drop [V]

&lt; 2

**PN5200**

PN-400-SBN14-HFPKG/US/ /V

Pressure sensors

Short-circuit protection	yes (non-latching)		
Switching frequency [Hz]	$\leq 170$		
<b>Measuring / setting range</b>			
Measuring range	0...5800 psi	0...400 bar	0...40 MPa
Setting range			
Set point, SP	60...5790 psi	4...400 bar	0.4...40.0 MPa
Reset point, rP	30...5760 psi	2...398 bar	0.2...39.8 MPa
in steps of	30 psi	2 bar	0.2 MPa
Factory setting	SP1 = 1440 psi; rP1 = 1320 psi		
<b>Accuracy / deviations</b>			
Accuracy / deviations (in % of the span)			
Switch point accuracy	$< \pm 0.5$		
Characteristics deviation *)	$< \pm 0.25$ (BFSL) / $< \pm 0.5$ (LS)		
Hysteresis	$< \pm 0.25$		
Repeatability **)	$< \pm 0.1$		
Long-term stability ***)	$< \pm 0.05$		
Temperature coefficients (TEMPCO) in the temperature range 0...80° C (in % of the span per 10 K)			
Greatest TEMPCO of the zero point	0.2		
Greatest TEMPCO of the span	0.2		
<b>Reaction times</b>			
Power-on delay time [s]	0.3		
Delay time programmable dS, dr [s]	0; 0.2...50		
Integrated watchdog	yes		
<b>Software / programming</b>			
Programming options	hysteresis / window function; N.O. / N.C; on delay, off delay; damping; display unit		
<b>Environment</b>			
Ambient temperature [°C]	-20...80 (UB < 32 V) / -20...60 (UB > 32 V)		
Storage temperature [°C]	-40...100		
Protection	IP 67		
<b>Tests / approvals</b>			
EMC	EN 61000-4-2 ESD: EN 61000-4-3 HF radiated: EN 61000-4-4 Burst: EN 61000-4-5 Surge: EN 61000-4-6 HF conducted:	4 kV CD / 8 kV AD 10 V/m 2 kV 0.5/1 kV 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]	231		
<b>Mechanical data</b>			
Process connection	1/4" NPT		
Materials (wetted parts)	stainless steel (303S22); ceramics; FPM (Viton)		
Housing materials	stainless steel (304S15); stainless steel 316L / 1.4404; PC (Makrolon); PBT (Pocan); PEI; FPM (Viton)		
Switching cycles min.	100 million		
Weight [kg]	0.273		

**PN5200**

PN-400-SBN14-HFPKG/US/ /V

Pressure sensors

**Displays / operating elements**

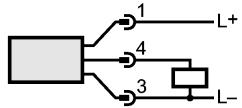
Display

Display unit 3 x LED green  
 Switching status LED yellow  
 Function display 4-digit alphanumeric display  
 Measured values 4-digit alphanumeric display

**Electrical connection**

Connection

M12 connector; gold-plated contacts

**Wiring**
 2  
  
 3  
 4
**Remarks**

Remarks

<sup>1)</sup> to EN50178, SELV, PELV  
<sup>\*)</sup> BFSL = Best Fit Straight Line / LS = Limit Value Setting  
<sup>\*\*) with temperature fluctuations < 10 K  
<sup>\*\*\*) in % of value of measuring range / 6 months</sup></sup>

Pack quantity

[piece]

1

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New generation available: PN7270