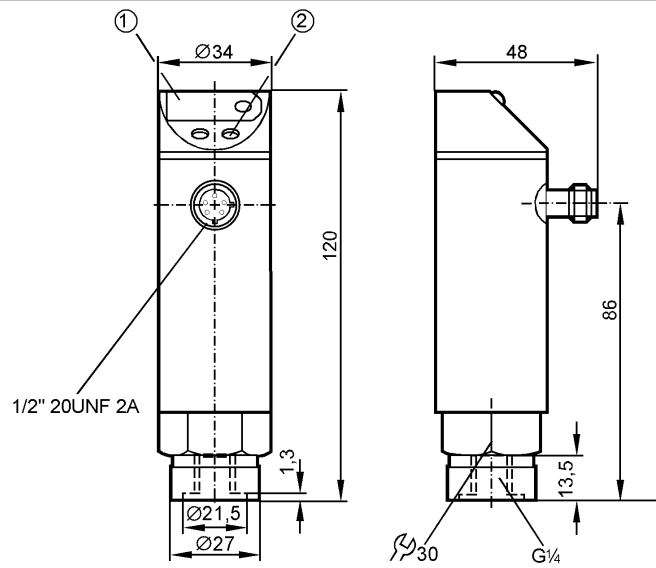


PY9920

PN-400-SBR14-HFBOW/LSI /V

Pressure sensors



- 1: 7-segment LED display
- 2: Programming button



Product characteristics

Electronic pressure monitor

Quick disconnect

Function programmable

Process connection: G 1/4 I

Switching output

7-segment LED display

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

Application

Application	special application (see operating instructions)		
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



PY9920

PN-400-SBR14-HFBOW/LS/ IV

Pressure sensors

Overload protection	no
Switching frequency [Hz]	≤ 160

Measuring / setting range

Display unit	bar, psi, MPa		
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:
Vibration resistance	DIN IEC 68-2-6:	20 g (10...2000 Hz)
MTTF [Years]	224.58	

Mechanical data

Process connection	G ¼ I
Materials (wetted parts)	stainless steel (303S22); ceramics; FKM
Housing materials	FPM (Viton); PA; PBT (Pocan); PC (Makrolon); stainless steel (304S15)
Switching cycles min.	100 million

PY9920

PN-400-SBR14-HFBOW/LS/ /V

Pressure sensors

Weight	[kg]	0.38
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Displays / operating elements

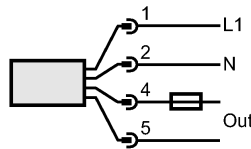
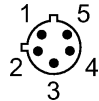
Display	Switching status LED red Function display 7-segment LED display Measured values 7-segment LED display
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Electrical connection

Connection	1/2" UNF-Connector
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Wiring

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.
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Pack quantity	[piece]	1
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