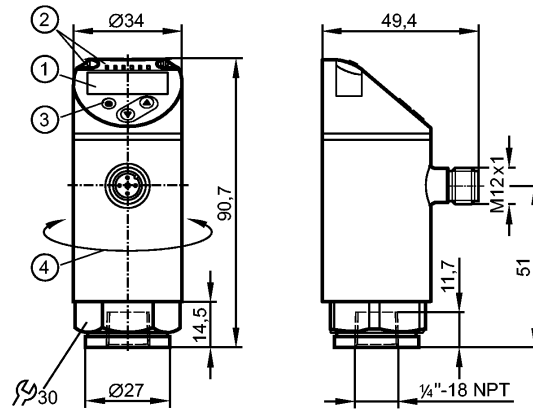


**PN7292**

PN-100-SEN14-QFRKG/US/ IV

Pressure sensors



- 1: 4-digit alphanumeric display / alternating indication of red and green
- 2: LEDs (display unit / switching status)
- 3: Programming button
- 4: Upper part of the housing can be rotated by 345°



**Product characteristics**

Electronic pressure monitor
M12 connector
Function programmable
Measuring element: ceramic-capacitive pressure measuring cell
Process connection: 1/4" NPT
2 outputs OUT1 = switching output OUT2 = switching output
4-digit alphanumeric display / alternating indication of red and green
Measuring range: 0...1450 psi / 0...100 bar / 0...10 MPa

**Application**

Application	Type of pressure: relative pressure liquids and gases of the fluid group 2 according to Article 9 of the Pressure Equipment Directive (PED)		
Pressure rating	4350 psi	300 bar	30 MPa
Bursting pressure min.	9400 psi	650 bar	65 MPa
Medium temperature [°C]	-25...80		

**Electrical data**

Electrical design	DC PNP/NPN
Operating voltage [V]	18...30 DC 1)
Current consumption [mA]	< 35
Insulation resistance [MΩ]	> 100 (500 V DC)
Protection class	III
Reverse polarity protection	yes

**Outputs**

Output	2 outputs OUT1 = switching output OUT2 = switching output
Output function	2 x normally open / closed programmable
Current rating [mA]	150; 200 (...60 °C); 250 (...40 °C)

**PN7292**

PN-100-SEN14-QFRKG/US/ /V

**Pressure sensors**

Voltage drop	[V]	< 2.5
Short-circuit protection		yes (non-latching)
Overload protection		yes
Switching frequency	[Hz]	≤ 170

Measuring / setting range			
Measuring range	0...1450 psi	0...100 bar	0...10 MPa
Setting range			
Set point, SP	10...1450 psi	1.0...100.0 bar	0.10...10.00 MPa
Reset point, rP	5...1445 psi	0.5...99.5 bar	0.05...9.95 MPa
in steps of	5 psi	0.5 bar	0.05 MPa

Accuracy / deviations	
Accuracy / deviations (in % of the span)	
Switch point accuracy	< ± 0.5
Characteristics deviation *)	< ± 0.25 (BFSL) / < ± 0.5 (LS)
Hysteresis	< ± 0.25
Repeatability **)	< ± 0.1
Long-term stability ***)	< ± 0.05
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	0.2

Reaction times	
Power-on delay time	[s] 0.3
Delay time programmable dS, dr	[s] 0...50
Integrated watchdog	yes

Software / programming	
Programming options	hysteresis / window function; N.O. / N.C; output polarity; on delay, off delay; damping; display unit

Interfaces	
IO-Link Device	
Transfer type	COM2 (38.4 kBaud)
IO-Link revision	1.1
SDCI standard	IEC 61131-9 FDIS
IO-Link Device ID	401 d / 00 01 91 h
Profiles	Smart Sensor: Process Data Variable; Device Identification, Device Diagnosis
SIO mode	yes
Required master port class	A
Process data analogue	1
Process data binary	2
Min. process cycle time	[ms] 2.3

Environment	
Ambient temperature	[°C] -25...80
Storage temperature	[°C] -40...100
Protection	IP 65 / IP 67

Tests / approvals	
Pressure equipment directive	article 3, section 3 - sound engineering practice

**PN7292**

PN-100-SEN14-QFRKG/US/ /V

**Pressure sensors**

EMC	DIN EN 61000-6-2 DIN EN 61000-6-3
Shock resistance	DIN EN 60068-2-27      50 g (11 ms)
Vibration resistance	DIN EN 60068-2-6      20 g (10...2000 Hz)
MTTF [Years]	236
UL approval number	J002

**Mechanical data**

Process connection	¼" NPT
Materials (wetted parts)	316L stainless steel / 1.4404; ceramics; FKM
Housing materials	316L stainless steel / 1.4404; PBT+PC-GF 30; PBT-GF 20; PC
Switching cycles min.	100 million
Tightening torque [Nm]	(2...3 turns after finger tightened (recommended tightening torque <sup>2)</sup> )
Weight [kg]	0.262

**Displays / operating elements**

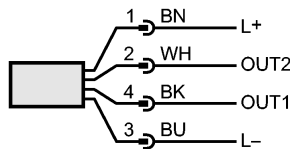
Display	Display unit      3 x LED green (bar, psi, MPa) Switching status    2 x LED yellow 4-digit alphanumeric display / alternating indication Measured values of red and green
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**Electrical connection**

Connection	M12 connector; gold-plated contacts
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**Wiring**

- Core colors
- BK    black
- BN    brown
- BU    blue
- WH    white



OUT1: switching output or IO-Link  
 OUT2: switching output  
 Colours to DIN EN 60947-5-2

**Remarks**

Remarks	1) to EN50178, SELV, PELV 2) Depends on lubrication, seal and pressure rating *) BFSL = Best Fit Straight Line / LS = Limit Value Setting **) with temperature fluctuations < 10 K ***) in% of the span / 6 months
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Pack quantity [piece]	1
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