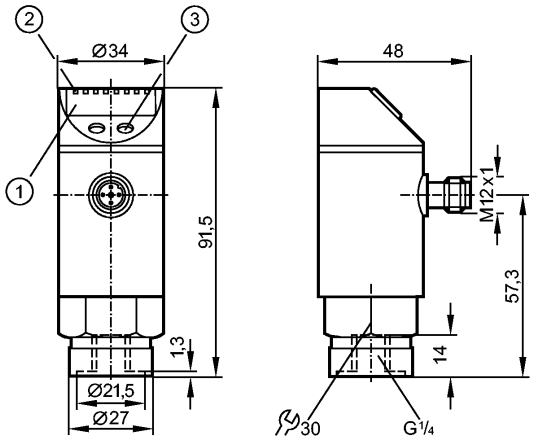
PY9292

PN-100-SBR14-QFRKG/US/ /V

Pressure sensors



1: 4-digit alphanumeric display
2: LEDs (display unit / switching status)
3: Programming button

CE

Product characteristics				
Electronic pressure monitor				
Quick disconnect				
Function programmable				
Process connection: G ¼ I				
2 outputs OUT1 = switching output OUT2 = switching output or diagnostic output				
4-digit alphanumeric display				
Measuring range: 0...100 bar / 0...1450 psi / 0...10 MPa				
Application				
Application		Type of pressure: relative pressure Liquids and gases For gaseous media the application is limited to max. 25 bar		
Pressure rating		300 bar	4350 psi	30 MPa
Bursting pressure min.		650 bar	9400 psi	65 MPa
Medium temperature	[°C]	-25...80		
Electrical data				
Electrical design		DC PNP/NPN		
Operating voltage	[V]	18...36 DC [1])		
Current consumption	[mA]	< 50		
Insulation resistance	[MΩ]	> 100 (500 V DC)		
Protection class		III		
Reverse polarity protection		yes		
Overvoltage protection	[V]	up to 40 V		
Outputs				
Output		2 outputs OUT1 = switching output OUT2 = switching output or diagnostic output		
Output function		2 x normally open / closed programmable or 1 x normally open / closed programmable + 1 x normally closed (diagnostic function)		
Current rating	[mA]	250		

PY9292

PN-100-SBR14-QFRKG/US/ /V

Pressure sensors

Voltage drop	[V]	< 2		
Short-circuit protection		yes (non-latching)		
Switching frequency	[Hz]	≤ 170		
Measuring / setting range				
Measuring range		0...100 bar	0...1450 psi	0...10 MPa
Setting range				
Set point, SP		1.0...100.0 bar	20...1450 psi	0.10...10.00 MPa
Reset point, rP		0.5...99.5 bar	10...1440 psi	0.05...9.95 MPa
in steps of		0.5 bar	10 psi	0.05 MPa
Accuracy / deviations				
Accuracy / deviations (in % of the span)				
Switch point accuracy		< ± 0.5		
Characteristics deviation *)		< ± 0.5		
Hysteresis		< ± 0.25		
Repeatability **)		< ± 0.1		
Long-term stability ***)		< ± 0.05		
Temperature coefficients (TEMPCO) in the temperature range -20...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; 0.2...50		
Integrated watchdog		yes		
Software / programming				
Programming options		hysteresis / window function; N.O. / N.C; output polarity; on delay, off delay; damping; display unit		
Environment				
Ambient temperature	[°C]	-20...80 (UB < 32 V) / -20...60 (UB > 32 V)		
Storage temperature	[°C]	-40...100		
Protection		IP 67		
Tests / approvals				
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]	219		
Mechanical data				
Process connection		G ¼ I		
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]	0.263		

PY9292

PN-100-SBR14-QFRKG/US/ /V

Pressure sensors

Displays / operating elements

Display	Display unit 3 x LED green Switching status 2 x LED yellow Function display 4-digit alphanumeric display Measured values 4-digit alphanumeric display

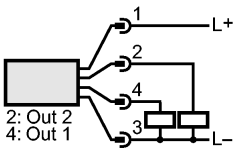
Electrical connection

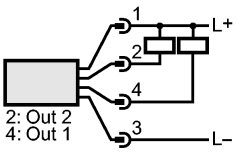
Connection	M12 connector; gold-plated contacts

Wiring

Programming of the output function
----------OUT1----------
Hno = hysteresis / normally open
Hnc = hysteresis / normally closed
Fno = window function / normally open
Fnc = window function / normally closed
----------OUT2----------
Hno = hysteresis / normally open
Hnc = hysteresis / normally closed
Fno = window function / normally open
Fnc = window function / normally closed
dESI = diagnostic function (normally closed)

Factory setting:
OUT1 = Hno
OUT2 = dESI





Remarks

Remarks	[1]) to EN50178, SELV, PELV *) linearity, incl. hysteresis and repeatability; (limit value setting to DIN 16086) **) with temperature fluctuations < 10 K ***) in% of the span / 6 months
Pack quantity [piece]	1