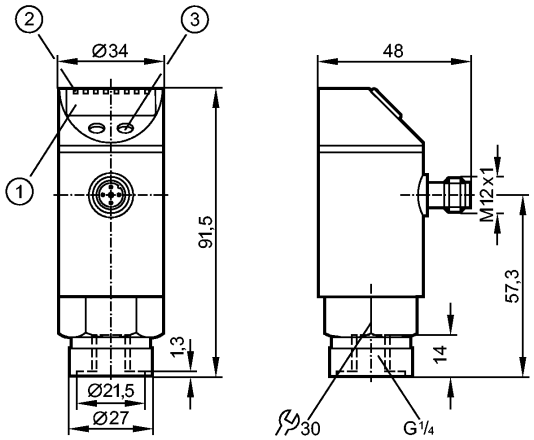
PY9961

PN-250-SBR14-QFPKA/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...250 bar / 0...3620 psi / 0...25 MPa				
Application				
Application		Type of pressure: relative pressure Liquids and gases For gaseous media the application is limited to max. 25 bar		
Pressure rating		400 bar	5800 psi	40 MPa
Bursting pressure min.		850 bar	12300 psi	85 MPa
Medium temperature	[°C]	-25...80		
Electrical data				
Electrical design		AC/DC PNP		
Operating voltage	[V]	18...55 DC / 24 AC ± 20 %		
Current consumption	[mA]	< 50		
Insulation resistance	[MΩ]	> 100 (500 V DC)		
Protection class		III		
Reverse polarity protection		yes		
Overvoltage protection	[V]	up to 60 V DC / 40 V AC		
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]	2 x 100		

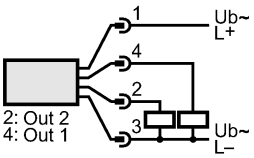
Voltage drop	[V]	< 3		
Short-circuit protection		yes (non-latching)		
Switching frequency	[Hz]	≤ 170		
Measuring / setting range				
Measuring range		0...250 bar	0...3620 psi	0...25 MPa
Setting range				
Set point, SP		2...250 bar	40...3620 psi	0.2...25.0 MPa
Reset point, rP		1...249 bar	20...3600 psi	0.1...24.9 MPa
in steps of		1 bar	20 psi	0.1 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 -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]	0.5		
Delay time programmable dS, dr	[s]	0; 0.2...50		
Integrated watchdog		yes		
Environment				
Ambient temperature	[°C]	-20...80		
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)	
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); EPDM/X (Santoprene)		
Switching cycles min.		100 million		
Weight	[kg]	0.262		
Displays / operating elements				
Display		Display unit Switching status Function display	3 x LED green 2 x LED yellow 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)

Remarks

Remarks	BFSL = Best Fit Straight Line / LS = Limit Value Setting **) with temperature fluctuations < 10 K ***) in% of the span / 6 months
Pack quantity [piece]	1