

- 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: G ¼ I

2 outputs

OUT1 = switching output

OUT2 = switching output or diagnostic output

4-digit alphanumeric display

Measuring range: 0...10 bar / 0...145 psi / 0.0...1.0 MPa

Application

Application	Type of pressure: relative pressure Liquids and gases		
Pressure rating	75 bar	1087 psi	7.5 MPa
Bursting pressure min.	150 bar	2175 psi	15 MPa
Medium temperature [°C]	-25...80		
Electrical data	DC PNP/NPN		
Operating voltage [V]	18...36 DC <sup>1)</sup>		
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	2 outputs		
Output	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		
Voltage drop [V]	< 2		
Short-circuit protection	yes (non-latching)		
Switching frequency [Hz]	≤ 170		
Measuring / setting range			

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Measuring range	0...10 bar	0...145 psi	0.0...1.0 MPa
Setting range			
Set point, SP	0.10...10.00 bar	2...145 psi	0.010...1.000 MPa
Reset point, rP	0.05...9.95 bar	1...144 psi	0.005...0.995 MPa
in steps of	0.05 bar	1 psi	0.005 MPa
Accuracy / deviations	Deviations (% of value of measuring range)		
Switch point accuracy	< ± 0.5		
Characteristics deviation	< ± 0.5		
Hysteresis	< ± 0.25		
Repeatability	< ± 0.1		
Long-term stability	< ± 0.05		
Temperature drift ( / 10 K)	< ± 0.65		
in the temperature range [°C]	-20...80		
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; diagnostic function; 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: 4 kV CD / 8 kV AD EN 61000-4-3 HF radiated: 10 V/m EN 61000-4-4 Burst: 2 kV EN 61000-4-5 Surge: 0.5/1 kV EN 61000-4-6 HF conducted: 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)		
Switching cycles min.	100 million		
Weight [kg]	0.256		
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		
<b>Wiring</b>			

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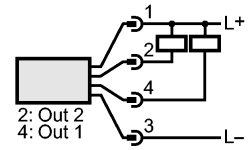
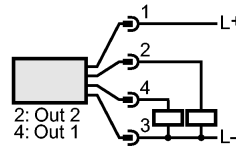
Programming of the output function

-----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

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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  
 The unit is a special version of the PN70xx series. For the special version the pressure compensation channel is closed. This increases the protection rating.

Pack quantity [piece]

1