

- 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 1/4 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 <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

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

Voltage drop [V]

< 2

Short-circuit protection

yes (non-latching)

Switching frequency [Hz]

≤ 170

**PY9292 - Electronic pressure monitor - eclass: 27201302 / 27-20-13-02**

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:	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)	
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		
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-----

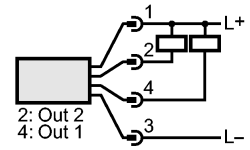
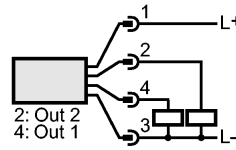
Hno = hysteresis / normally open  
 Hnc = hysteresis / normally closed  
 Fno = window function / normally open  
 Fnc = window function / normally closed

-----OUT2-----

Hno = hysteresis / normally open  
 Hnc = hysteresis / normally closed  
 Fno = window function / normally open  
 Fnc = window function / normally closed  
 dESI = diagnostic function (normally closed)

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