

Product characteristics

Electronic pressure sensor

Quick disconnect

Programmable via EPS interface

Adjustment of the switch point by teach function

Process connection: G ¼ A / M5 I

2 switching outputs or
1 switching output
+ 1 teach input

Measuring range: 0...250 bar / 0...3630 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

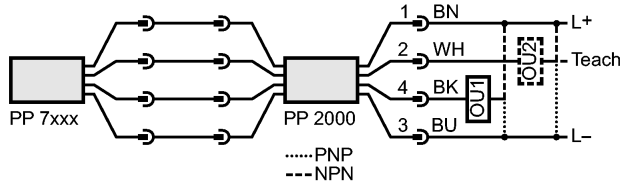
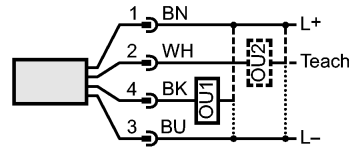
Pressure rating	400 bar	5800 psi	40 MPa
Bursting pressure min.	850 bar	12300 psi	85 MPa
Medium temperature [°C]	-25...80		
Electrical data	DC PNP/NPN		
Electrical design	DC PNP/NPN		
Operating voltage [V]	9.6...30 DC ¹⁾		
Current consumption [mA]	< 45		
Insulation resistance [MΩ]	> 100 (500 V DC)		
Protection class	III		
Reverse polarity protection	yes		
Outputs	2 switching outputs or 1 switching output + 1 teach input		
Output function	2 x normally open / closed programmable		
Current rating [mA]	2 x 250		
Voltage drop [V]	< 2		
Short-circuit protection	yes (non-latching)		
Overload protection	yes		
Switching frequency [Hz]	≤ 170		
Measuring / setting range			

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Measuring range	0...250 bar	0...3630 psi	0...25 MPa
Setting range			
Set point, SP	3...250 bar	40...3630 psi	0.3...25.0 MPa
Reset point, rP	2...249 bar	20...3610 psi	0.2...24.9 MPa
in steps of	1 bar	10 psi	0.1 MPa
Accuracy / deviations			
Accuracy / deviations (in % of the span)			
Switch point accuracy		< ± 1.5	
Characteristics deviation *)		< ± 0.25 (BFSL) / < ± 0.5 (LS)	
Linearity		< ± 0.5	
Hysteresis		< ± 0.1	
Repeatability **)		< ± 0.1	
Long-term stability ***)		< ± 0.1	
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		< ± 0.3	
Reaction times			
Power-on delay time [s]		0.3	
Min. response time switching output [ms]		3	
Damping for the switching output (dAP) [s]		0...4	
Software / programming			
Adjustment of the switch point		programming unit / teach function	
Environment			
Ambient temperature [°C]		-25...80	
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 61000-4-6 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 A / M5 I	
Materials (wetted parts)		stainless steel (303S22); ceramics; FPM (Viton)	
Housing materials		stainless steel (304S15); PA	
Switching cycles min.		100 million	
Weight [kg]		0.199	
Displays / operating elements			
Display		Power	LED green
		Switching status	2 x LED yellow
Electrical connection			
Connection		M12 connector; gold-plated contacts	
Wiring			

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Pin connection when delivered:
 Pin 2 = Teach input
 Pin 4 = switching output/
 communication with the
 programming unit (e.g. PP2000)



Remarks
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- 1) Operating voltage for PP2000 with sensor: min. 18 V DC
- *) BFSL = Best Fit Straight Line / LS = Limit Value Setting
- ***) with temperature fluctuations < 10 K
- ***) in % of the span per year

Pack quantity [piece]

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