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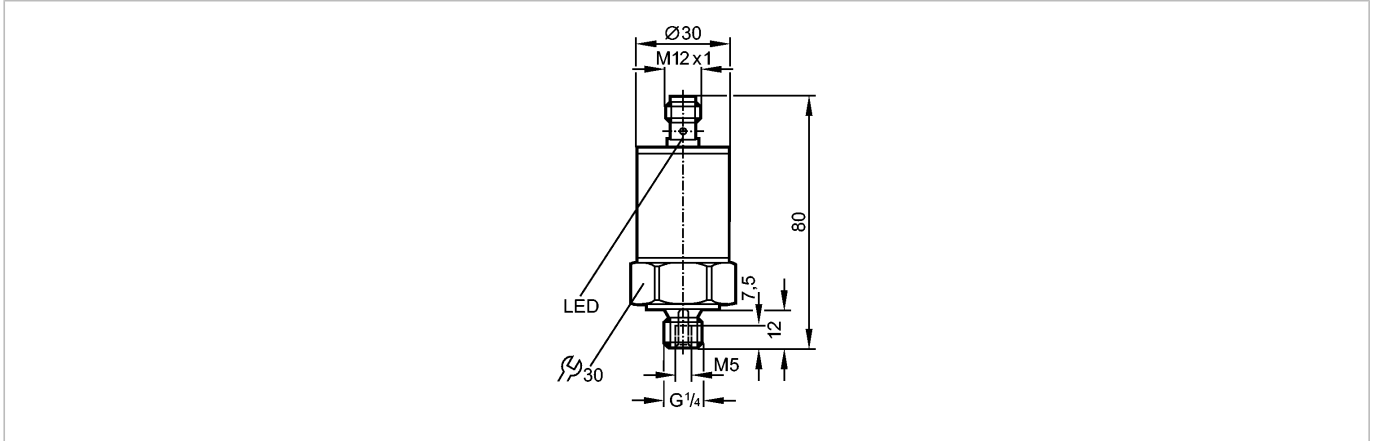
efectorsoo

PD7024



PD-010-RBG14-QFRKG/US/ /E

Pressure sensors



Product characteristics

Electronic pressure sensor

Quick disconnect

Programmable via EPS interface

Adjustment of the switch point by teach function

Process connection: G 1/4 A

2 switching outputs or
1 switching output
+ 1 teach input

Measuring range: 0...10 bar / 0...145 psi / 0...1000 kPa

Application

Application

Type of pressure: relative pressure
Liquids and gases
Cannot be used for oils

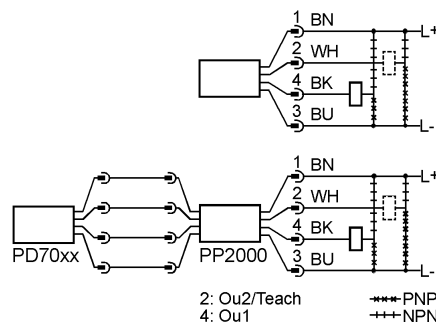
Pressure rating	50 bar	725 psi	5000 kPa
Bursting pressure min.	150 bar	2175 psi	15000 kPa
Medium temperature [°C]	-25...80		
Electrical data	DC PNP/NPN		
Electrical design	DC PNP/NPN		
Operating voltage [V]	9.6...30 DC 1)		
Current consumption [mA]	< 45		
Insulation resistance [MΩ]	> 100 (500 V DC)		
Protection class	III		
Reverse polarity protection	yes		
Outputs	2 switching outputs or 1 switching output + 1 teach input		
Output	2 x normally open / closed programmable		
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		
Measuring / setting range	0...10 bar / 0...145 psi / 0...1000 kPa		
Measuring range	0...10 bar	0...145 psi	0...1000 kPa
Setting range	0.10...9.99 bar / 1...145 psi / 10...999 kPa		
Set point, SP	0.10...9.99 bar	1...145 psi	10...999 kPa
Reset point, rP	0.05...9.94 bar	1...144 psi	5...994 kPa

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	0.01 bar	1 psi	1 kPa
in steps of			
Factory setting	OU1 = Hno; OU2 = tch SP1 = 2.50 bar; rP1 = 2.302 bar		
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		
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)		
MTTF [Years]	254		
Mechanical data			
Process connection	G ¼ A		
Materials (wetted parts)	stainless steel (303S22); ceramics; EPDM		
Housing materials	stainless steel (304S15); PA		
Switching cycles min.	100 million		
Weight [kg]	0.194		
Displays / operating elements			
Display	Power LED green Switching status 2 x LED yellow		
Electrical connection			
Connection	M12 connector; gold-plated contacts		

Wiring

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

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*) BFSL = Best Fit Straight Line
**) with temperature fluctuations < 10 K
***) in % of the span per year

Pack quantity	[piece]	1
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