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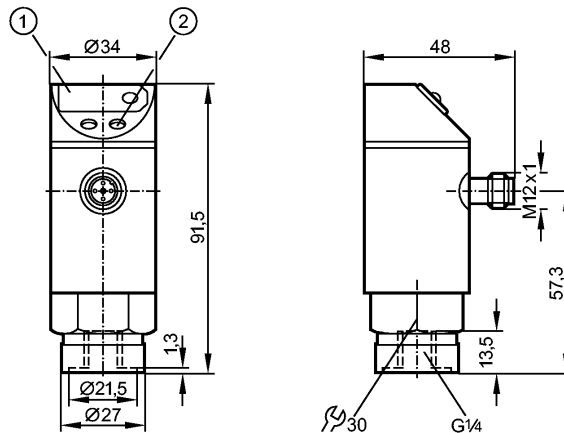
efectorsoo

PE3024



PE-010-RBR14-KFPKG/US/ /E

Pressure sensors



1: 7-segment LED display

2: Programming button



Product characteristics

Combined pressure sensor

Quick disconnect

Function programmable

Process connection: G ¼ I

Switching output, Analog output

7-segment LED display

Measuring range: 0...10 bar

Application

Application

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

Pressure rating [bar]

50

Bursting pressure min. [bar]

150

Medium temperature [°C]

-25...80

Electrical data

Electrical design

DC PNP

Operating voltage [V]

20...30 DC

Current consumption [mA]

< 60

Insulation resistance [MΩ]

> 100 (500 V DC)

Protection class

III

Reverse polarity protection

yes

Outputs

Output

Switching output, Analog output

Output function

normally open / closed programmable, 4...20 mA analog

Current rating [mA]

250

Voltage drop [V]

< 2

Short-circuit protection

yes (non-latching)

Overload protection

yes

Switching frequency for a given set response time of one output *)

Response time (dAP)

[ms] 3 6 10 17 30 60 125 250 500

Switching frequency

[Hz] 170 80 50 30 16 8 4 2 1

Analog output

4...20 mA

PE3024 - Combined pressure sensor - eclass: 27201302 / 27-20-13-02

Max. load	[Ω]	max. 500
Measuring / setting range		
Measuring range	[bar]	0...10
Setting range		
Set point, SP	[bar]	0.10...10.0
Reset point, rP	[bar]	0.05...9.95
in steps of	[bar]	0.05
Accuracy / deviations		
Deviations (% of value of measuring range)		
Switch point accuracy		< ± 1.5
Characteristics deviation		< ± 1.0
Repeatability		< ± 0.25
Temperature drift (/ 10 K)		< ± 0.3
in the temperature range	[°C]	-25...80
Reaction times		
Power-on delay time	[s]	0.2
Delay time programmable dS, dr	[s]	0, 0.2,...10, 11,...50
Response time analog output	[ms]	3
Integrated watchdog		yes
Software / programming		
Programming options		hysteresis / window function; N.O. / N.C.; on delay, off delay; damping
Adjustment of the switch point		Programming button
Environment		
Ambient temperature	[°C]	-25...80
Storage temperature	[°C]	-40...100
Protection		IP 65
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 I
Materials (wetted parts)		EPDM/X (Santoprene); ceramics; stainless steel (303S22)
Housing materials		EPDM/X (Santoprene); FPM (Viton); PA; PBT (Pocan); PC (Makrolon); PTFE; stainless steel (304S15)
Switching cycles min.		100 million
Weight	[kg]	0.285
Displays / operating elements		
Display		Switching status LED red Function display 7-segment LED display Measured values 7-segment LED display
Electrical connection		
Connection		M12 connector; gold-plated contacts

Wiring

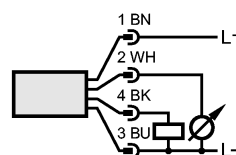
Programming of the output function:

Hno = hysteresis / N.O.

Hnc = hysteresis / N.C.

Fno = window function / N.O.

Fnc = window function / N.C.



Remarks

Remarks

*) at rectangular pressure characteristic and setting:
switch-on point (SPx) = 70 %, switch-off point (rPx) = 30 %

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Pack quantity [piece] 1

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