

PE3002

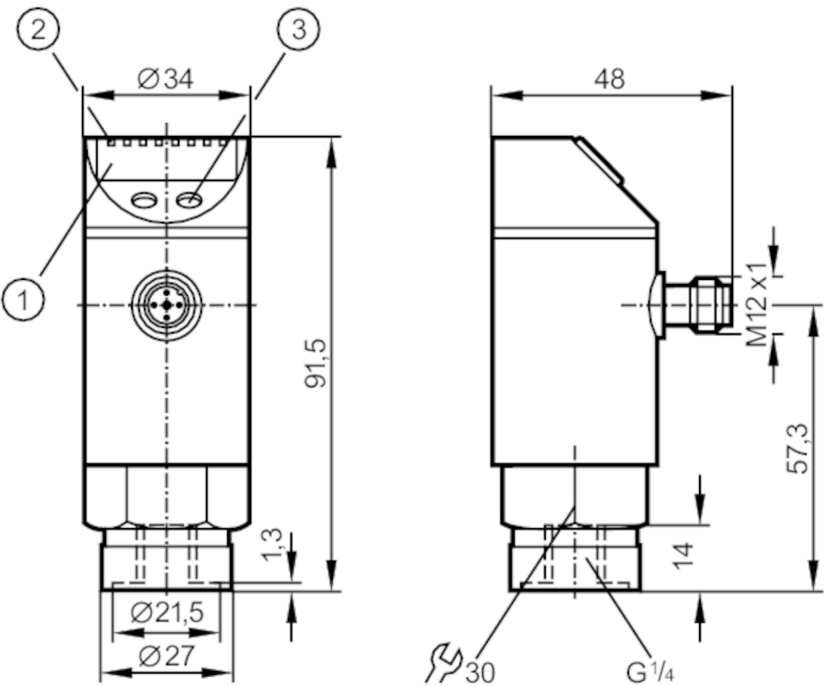


Pressure sensor with display

PE-100-SDR14-MFPKG/US/ /E

Article to be discontinued

Alternative articles: PE2092 or PE2592
When selecting an alternative article and accessories please note that technical data may differ!



- 1 alphanumeric display 4-digit
- 2 LEDs Display unit / Switching status
- 3 Programming button



Product characteristics			
Number of inputs and outputs	Number of digital outputs: 1; Number of analog outputs: 1		
Measuring range	0...100 bar	0...1450 psi	0...10 MPa
Process connection	threaded connection G 1/4 Internal thread		
Application			
System	gold-plated contacts		
Application	for industrial applications		
Media	liquids and gases		
Conditionally suitable for	use in gases at pressures > 25 bar only on request		
Cannot be used for	oils		
Medium temperature [°C]	-25...80		
Min. bursting pressure	650 bar	9400 psi	65 MPa
Pressure rating	300 bar	4350 psi	30 MPa
Type of pressure	relative pressure		
Electrical data			
Operating voltage [V]	18...36 DC; (to SELV/PELV)		
Current consumption [mA]	< 50		



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Min. insulation resistance [MΩ]	100; (500 V DC)
Protection class	III
Reverse polarity protection	yes
Overvoltage protection	yes; (< 40 V)
Power-on delay time [s]	0.3
Integrated watchdog	yes

Inputs / outputs

Number of inputs and outputs	Number of digital outputs: 1; Number of analog outputs: 1
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Outputs

Total number of outputs	2
Output signal	switching signal; analog signal; (configurable)
Electrical design	PNP
Number of digital outputs	1
Output function	normally open / closed; (configurable)
Max. voltage drop switching output DC [V]	2
Permanent current rating of switching output DC [mA]	250
Switching frequency DC [Hz]	< 170
Number of analog outputs	1
Analog current output [mA]	4...20
Max. load [Ω]	500
Analog voltage output [V]	0...10
Min. load resistance [Ω]	2000
Short-circuit protection	yes
Type of short-circuit protection	yes (non-latching)

Measuring/setting range

Measuring range	0...100 bar	0...1450 psi	0...10 MPa
Set point SP	1...100 bar	20...1450 psi	0.1...10 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
Factory setting		SP1 = 25.0 bar	rP1 = 23.0 bar

Accuracy / deviations

Switch point accuracy [% of the span]	< ± 0,5
Repeatability [% of the span]	< ± 0,1; (with temperature fluctuations < 10 K)
Characteristics deviation [% of the span]	< ± 0,25 (BFSL) / < ± 0,5 (LS); (BFSL = Best Fit Straight Line; LS = limit value setting)
Hysteresis deviation [% of the span]	< ± 0,25
Long-term stability [% of the span]	< ± 0,05; (per 6 months)
Temperature coefficient zero point [% of the span / 10 K]	0,2; (-20...80 °C)

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Temperature coefficient span [% of the span / 10 K]		0,2; (-20...80 °C)		
Reaction times				
Delay time programmable dS, dr		0; 0,2...50		
Max. response time analog output		3		
Software / programming				
Parameter setting options		hysteresis / window; normally open / closed; switch-on/switch-off delay; Damping; Display unit; current/voltage output		
Operating conditions				
Ambient temperature		[°C]		-20...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 61000-4-5 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]		213
Pressure equipment directive				sound engineering practice; can be used for group 2 fluids; group 1 fluids on request
Mechanical data				
Weight		[g]		262.5
Material				stainless steel (1.4301 / 304); stainless steel (1.4404 / 316L); PC; PBT; PEI; FKM
Materials (wetted parts)				stainless steel (1.4404 / 316L); ceramics; Sealing of the measuring cell: EPDM
Min. pressure cycles				100 million
Process connection				threaded connection G 1/4 Internal thread
Displays / operating elements				
Display		Display unit		3 x LED, green
		Switching status		LED, yellow
		Function display		alphanumeric display, 4-digit
		Measured values		alphanumeric display, 4-digit
Remarks				
Pack quantity				1 pcs.

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Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection

