

# PE3001



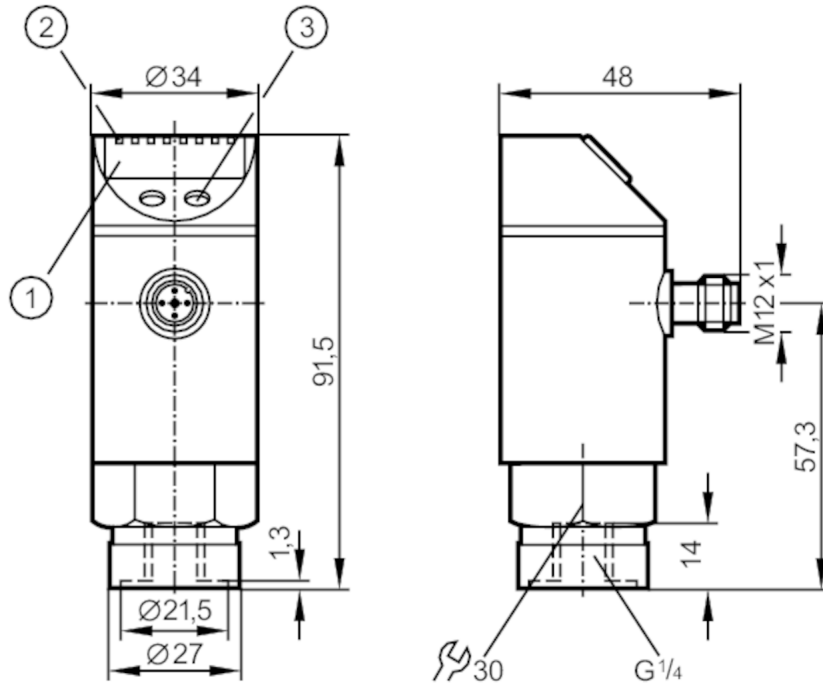
## Pressure sensor with display

PE-250-SDR14-MFPKG/US/ /E

Article to be discontinued

Alternative articles: PE2091 or PE2591

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...250 bar	0...3625 psi	0...25 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	850 bar	12300 psi	85 MPa
Pressure rating	400 bar	5800 psi	40 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...250 bar	0...3625 psi	0...25 MPa
Set point SP	2...250 bar	40...3620 psi	0.2...25 MPa
Reset point rP	1...249 bar	20...3600 psi	0.1...24.9 MPa
In steps of	1 bar	20 psi	0.1 MPa
Factory setting		SP1 = 63 bar	rP1 = 58 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; (0...80 °C)

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Temperature coefficient span [% of the span / 10 K]	0,2; (0...80 °C)	
<b>Reaction times</b>		
Delay time programmable dS, dr [s]	0; 0,2...50	
Max. response time analog output [ms]	3	
<b>Software / programming</b>		
Parameter setting options	hysteresis / window; normally open / closed; switch-on/switch-off delay; Damping; Display unit; current/voltage output	
<b>Operating conditions</b>		
Ambient temperature [°C]	-20...80	
Storage temperature [°C]	-40...100	
Protection	IP 67	
<b>Tests / approvals</b>		
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	
<b>Mechanical data</b>		
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	
<b>Displays / operating elements</b>		
Display	Display unit	3 x LED, green
	Switching status	LED, yellow
	Function display	alphanumeric display, 4-digit
	Measured values	alphanumeric display, 4-digit
<b>Remarks</b>		
Pack quantity	1 pcs.	

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### Electrical connection

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



### Connection

