

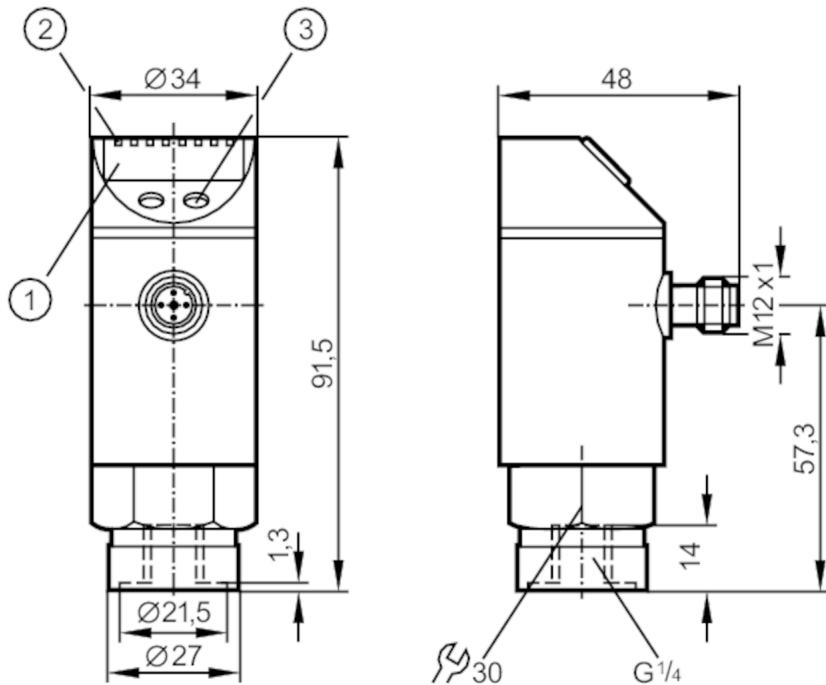
Pressure sensor with display

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

phase-out article

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 analogue outputs: 1		
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Measuring range	0...100 bar	0...1450 psi	0...10 MPa
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Process connection	threaded connection G 1/4 internal thread		
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Application

Special feature	Gold-plated contacts		
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Application	for industrial applications		
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Media	liquids and gases		
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Conditionally suitable for	use in gases at pressures > 25 bar only on request		
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Cannot be used for	oils		
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Medium temperature [°C]	-25...80		
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Min. bursting pressure	650 bar	9400 psi	65 MPa
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Pressure rating	300 bar	4350 psi	30 MPa
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Type of pressure	relative pressure		
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Electrical data

Operating voltage [V]	18...36 DC; (to SELV/PELV)		
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Current consumption [mA]	< 50		
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PE3002

Pressure sensor with display

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Min. insulation resistance	[MΩ]	100; (500 V DC)	
Protection class		III	
Reverse polarity protection		yes	
Oversupply 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 analogue outputs: 1	
Outputs			
Total number of outputs		2	
Output signal		switching signal; analogue signal; (configurable)	
Electrical design		PNP	
Number of digital outputs		1	
Output function		normally open / normally closed; (parameterisable)	
Max. voltage drop switching output DC	[V]	2	
Permanent current rating of switching output DC	[mA]	250	
Switching frequency DC	[Hz]	< 170	
Number of analogue outputs		1	
Analogue current output	[mA]	4...20	
Max. load	[Ω]	500	
Analogue voltage output	[V]	0...10	
Min. load resistance	[Ω]	2000	
Short-circuit protection		yes	
Type of short-circuit protection		pulsed	
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		< ± 0,5	
Repeatability	[% of the span]	< ± 0,1; (with temperature fluctuations < 10 K)	
Characteristics deviation		< ± 0,25 (BFSL) / < ± 0,5 (LS); (BFSL = Best Fit Straight Line; LS = limit value setting)	
Hysteresis deviation		< ± 0,25	
Long-term stability		< ± 0,05; (per 6 months)	
Temperature coefficient zero point		0,2; (-20...80 °C)	
	[% of the span / 10 K]		

PE3002



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Temperature coefficient span [% of the span / 10 K]	0,2; (-20...80 °C)	
Response times		
Delay time programmable dS, [s] dr	0; 0,2...50	
Max. response time analogue output [ms]	3	
Software / programming		
Parameter setting options	hysteresis / window; normally open / normally 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 EN 61000-4-3 HF radiated EN 61000-4-4 Burst EN 61000-4-5 Surge EN 61000-4-6 HF conducted	4 kV CD / 8 kV AD 10 V/m 2 kV 0,5/1 kV 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	
Materials	stainless steel (304/1.4301); stainless steel (316L/1.4404); PC; PBT; PEI; FKM	
Materials (wetted parts)	stainless steel (316L/1.4404); 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 switching status function display measured values	3 x LED, green LED, yellow alphanumeric display, 4-digit 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

