

PE3006

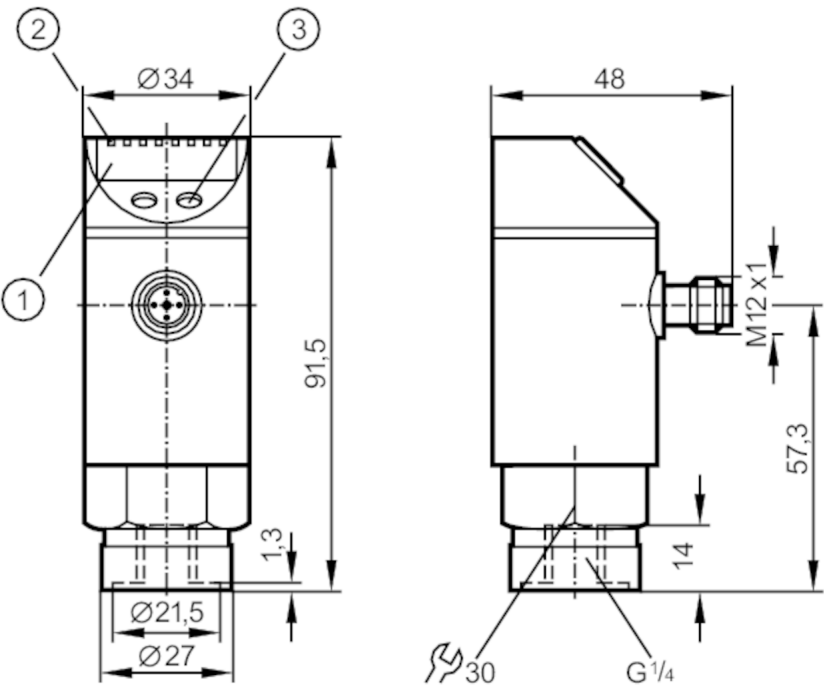


Pressure sensor with display

PE-2,5-RDR14-MFPKG/US/ IE

Discontinued article

Alternative articles: PE2096 or PE2596
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

Output signal	switching signal; analog signal; (configurable)			
Measuring range	0...2.5 bar	0...2500 mbar	0...36.3 psi	0...250 kPa
Process connection	threaded connection G 1/4 Internal thread			

Application

System	gold-plated contacts		
Application	for industrial applications		
Media	liquids and gases		
Cannot be used for	oils		
Medium temperature [°C]	-25...80		
Min. bursting pressure	50 bar	725 psi	5000 kPa
Pressure rating	20 bar	290 psi	2000 kPa
Type of pressure	relative pressure		

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Electrical data				
Operating voltage	[V]	18...36 DC; (according to EN 50178 SELV/PELV)		
Current consumption	[mA]	< 50		
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		
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...2.5 bar	0...2500 mbar	0...36.3 psi 0...250 kPa
Set point SP		0.02...2.5 bar	0.4...36.2 psi	2...250 kPa
Reset point rP		0.01...2.49 bar	0.2...36 psi	1...249 kPa
In steps of		0.01 bar	0.2 psi	1 kPa
Factory setting			SP1 = 0.63 bar	rP1 = 0.58 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		< ± 0,05; (per 6 months)		

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	[% of the span]	
Temperature coefficient zero point		0,2; (-20...80 °C)
	[% of the span / 10 K]	
Temperature coefficient span		0,2; (-20...80 °C)
	[% of the span / 10 K]	

Reaction times		
Delay time programmable dS, dr	[s]	0; 0,2...50
Max. response time analog output	[ms]	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]	231
Pressure equipment directive	sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	

Mechanical data		
Weight	[g]	260.5
Material	stainless steel (1.4301 / 304); stainless steel (1.4404 / 316L); PC; PBT; PEI; FKM; PTFE	
Materials (wetted parts)	stainless steel (1.4404 / 316L); ceramics (99.9 % Al ₂ O ₃); 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.

Electrical connection	
Connector: 1 x M12; Contacts: gold-plated	

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Connection

