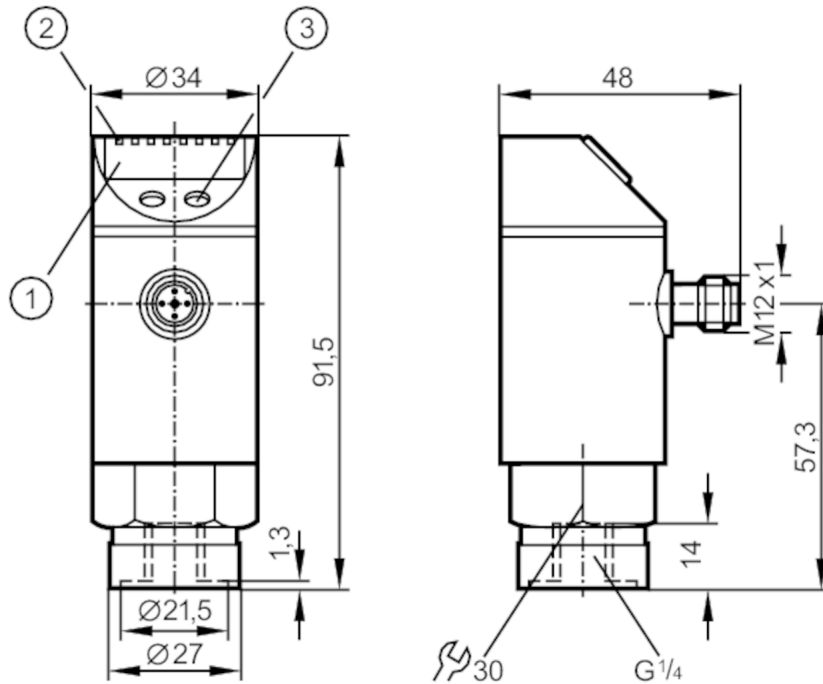


PE3006



Pressure sensor with display

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



- 1 alphanumeric display 4-digit
- 2 LEDs Display unit / switching status
- 3 programming button



Application

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

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		
Overtoltage 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
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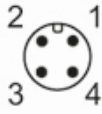
Outputs			
Total number of outputs		2	
Output signal		switching signal; analogue signal; (configurable)	
Electrical design		PNP	
Number of digital outputs		1	
Output function		normally open / normally closed; (parameterisable)	
Max. voltage drop switching output DC	[V]	2	
Permanent current rating of 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...2.5 bar	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	[% of the span]	< ± 0,05; (per 6 months)	
Temperature coefficient zero point	[% of the span / 10 K]	0,2; (-20...80 °C)	
Temperature coefficient span	[% of the span / 10 K]	0,2; (-20...80 °C)	
Response times			
Delay time programmable dS, dr	[s]	0; 0,2...50	
Max. response time analogue output	[ms]	3	

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Pressure sensor with display

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

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	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	
Mechanical data		
Weight [g]	261	
Materials	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

