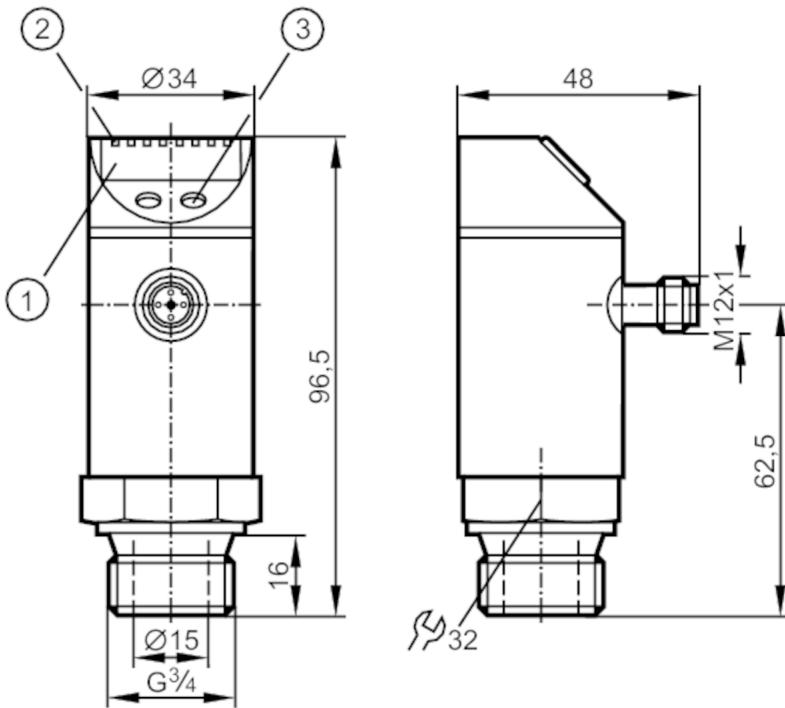


Pressure sensor with display

PY-250-SER34-MFPKG/US/ IV

phase-out article

Discontinuation date: 03/31/2024



- 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		
Measuring range	0...250 bar	0...3625 psi	0...25 MPa
Process connection	threaded connection G 3/4 external thread		

Application

Special feature	Gold-plated contacts		
Media	viscous media and liquids with suspended particles		
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		
No dead space	yes		

Electrical data

Operating voltage [V]	18...36 DC; (to 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)		

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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]	(Ub - 10 V) / 20 mA	
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...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
Accuracy / deviations			
Switch point accuracy [% of the final value]		< ± 0,5	
Repeatability [% of the final value]		< ± 0,1; (with temperature fluctuations < 10 K)	
Characteristics deviation [% of the final value]		< ± 0,5	
Hysteresis deviation [% of the final value]		< ± 0,25	
Long-term stability [% of the final value]		< ± 0,05	
Response times			
Delay time programmable dS, dr	[s]	0; 0,2...50	
Max. response time analogue output	[ms]	3	

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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]	219			
Pressure Equipment Directive	Sound engineering practice; can be used for group 2 fluids; group 1 fluids on request			
Mechanical data				
Weight [g]	286			
Materials	stainless steel (304/1.4301); stainless steel (316L/1.4404); PC; PBT; PEI; FKM			
Materials (wetted parts)	stainless steel (316L/1.4404); ceramics; FKM			
Min. pressure cycles	100 million			
Process connection	threaded connection G 3/4 external 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.			
Electrical connection				
Connector: 1 x M12; coding: A; Contacts: gold-plated				

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Connection

