

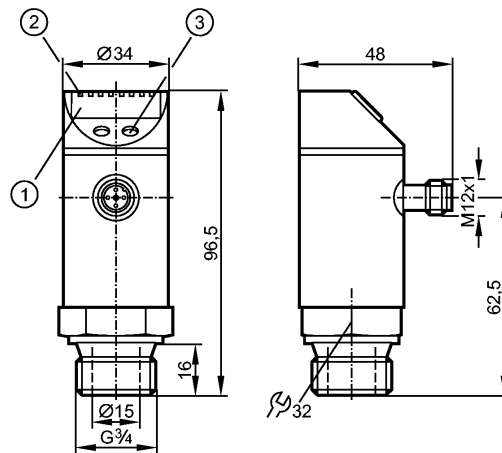


PY9951

PY-250-SER34-MFPKG/US/ V



Pressure sensors



- 1: 4-digit alphanumeric display
- 2: LEDs (display unit / switching status)
- 3: Programming button



Product characteristics

Combined pressure sensor

Quick disconnect

no dead space

Function programmable

Process connection: G 3/4

Switching output, Analog output

4-digit alphanumeric display

Measuring range: 0...250 bar / 0...3625 psi / 0...25 MPa

Application

Application	Type of pressure: relative pressure viscous media and liquids with suspended particles		
Pressure rating	400 bar	5800 psi	40 MPa
Bursting pressure min.	850 bar	12300 psi	85 MPa
Medium temperature [°C]	-25...80		

Electrical data

Electrical design	DC PNP		
Operating voltage [V]	18...36 DC ¹⁾		
Current consumption [mA]	< 50		
Insulation resistance [MΩ]	> 100 (500 V DC)		
Protection class	III		
Reverse polarity protection	yes		
Overvoltage protection [V]	up to 40 V		

Outputs

Output	Switching output, Analog output		
Output function	normally open / closed programmable; 4...20 mA or 0...10 V		
Current rating [mA]	250		
Voltage drop [V]	< 2		
Short-circuit protection	yes (non-latching)		
Switching frequency [Hz]	≤ 170		



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Analog output	4...20 mA / 0...10 V
Max. load [Ω]	4...20 mA: max. (U _b - 10 V) x 50 / 0...10 V: min. 2000

Measuring / setting range

Measuring range	0...250 bar	0...3625 psi	0...25 MPa
Setting range			
Set point, SP	2...250 bar	40...3620 psi	0.2...25.0 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

Deviations (% of value of measuring range)	
Switch point accuracy	< \pm 0.5
Characteristics deviation	< \pm 0.5
Hysteresis	< \pm 0.25
Repeatability	< \pm 0.1
Long-term stability	< \pm 0.05
in the temperature range [$^{\circ}$ C]	0...80

Reaction times

Power-on delay time [s]	0.3
Delay time programmable dS, dr [s]	0; 0.2...50
Response time analog output [ms]	< 3
Integrated watchdog	yes

Software / programming

Programming options	hysteresis / window function; N.O. / N.C; on delay, off delay; damping; display unit; current / voltage output
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Environment

Ambient temperature [$^{\circ}$ C]	-20...80
Storage temperature [$^{\circ}$ 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:
Vibration resistance	DIN IEC 68-2-6:	20 g (10...2000 Hz)

Mechanical data

Process connection	G $\frac{3}{4}$
Materials (wetted parts)	stainless steel 316L / 1.4404; ceramics; FPM (Viton)
Housing materials	stainless steel (304S15); stainless steel 316L / 1.4404; PC (Makrolon); PBT (Pocan); PEI; FPM (Viton)
Switching cycles min.	100 million
Weight [kg]	0.289

Displays / operating elements

Display	Display unit 3 x LED green Switching status LED yellow Function display 4-digit alphanumeric display
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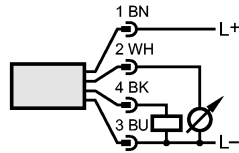
Measured values 4-digit alphanumeric display

Electrical connection

Connection

M12 connector; gold-plated contacts

Wiring



Remarks

Remarks

- 1) to EN50178, SELV, PELV
- *) linearity, incl. hysteresis and repeatability;
(limit value setting to DIN 16086)
- ***) with temperature fluctuations < 10 K
- ***) in % of value of measuring range / 6 months

Pack quantity

[piece]

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