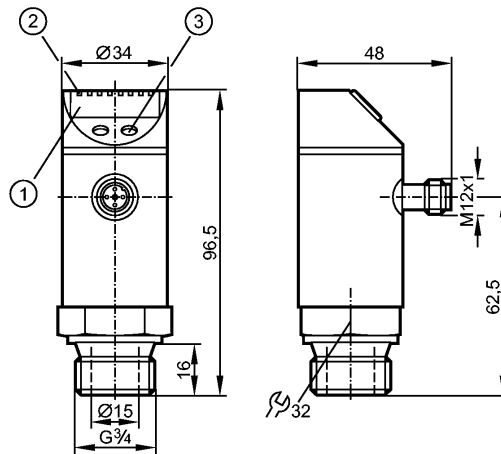




PY-010-RER34-MFPKG/US/ V

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 A

Switching output,
analogue output (0 bar = 4 mA / 0 V; 10 bar = 20 mA / 10 V)

4-digit alphanumeric display

Measuring range: -1...10 bar / -14.5...145 psi / -0.1...1.0 MPa

Application

Application

Type of pressure: relative pressure
Hygienic systems, viscous media and liquids with suspended particles
Liquids and gases

Pressure rating	75 bar	1087 psi	7.5 MPa
Bursting pressure min.	150 bar	2175 psi	15 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,
analogue output (0 bar = 4 mA / 0 V; 10 bar = 20 mA / 10 V)
normally open / closed programmable; 4...20 mA or 0...10 V

Output function

Current rating [mA]

250

Voltage drop [V]

< 2

Short-circuit protection

yes (non-latching)

Switching frequency [Hz]

≤ 170

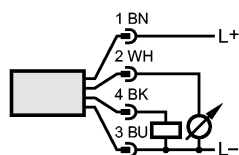
Analog output

4...20 mA / 0...10 V

PY9954 - Combined pressure sensor - eclass: 27201302 / 27-20-13-02

Max. load [Ω]	4...20 mA: max. (UB - 10) x 50; 0...10 V: min. 2000		
Measuring / setting range			
Measuring range	-1...10 bar	-14.5...145 psi	-0.1...1.0 MPa
Setting range			
Set point, SP	-0.90...10.00 bar	-12...145 psi	-0.090...1.000 MPa
Reset point, rP	-0.95...9.95 bar	-13...144 psi	-0.095...0.995 MPa
in steps of	0.05 bar	1 psi	0.005 MPa
Accuracy / deviations			
Deviations (% of value of measuring range)			
Switch point accuracy	< ± 0.5		
Characteristics deviation	< ± 0.5		
Hysteresis	< ± 0.25		
Repeatability	< ± 0.1		
Long-term stability	< ± 0.05		
in the temperature range [°C]	-20...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		
Environment			
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)		
Mechanical data			
Process connection	G ¾ A		
Materials (wetted parts)	stainless steel 316L / 1.4404; ceramics (99.9 % Al ₂ O ₃); FPM (Viton)		
Housing materials	stainless steel (304S15); stainless steel 316L / 1.4404; PC (Makrolon); PBT (Pocan); PEI; FPM (Viton); PTFE		
Switching cycles min.	100 million		
Weight [kg]	0.281		
Displays / operating elements			
Display	Display unit 3 x LED green Switching status LED yellow Function display 4-digit alphanumeric display Measured values 4-digit alphanumeric display		
Electrical connection			
Connection	M12 connector; gold-plated contacts		

Wiring



PY9954 - Combined pressure sensor - eclass: 27201302 / 27-20-13-02

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]

1