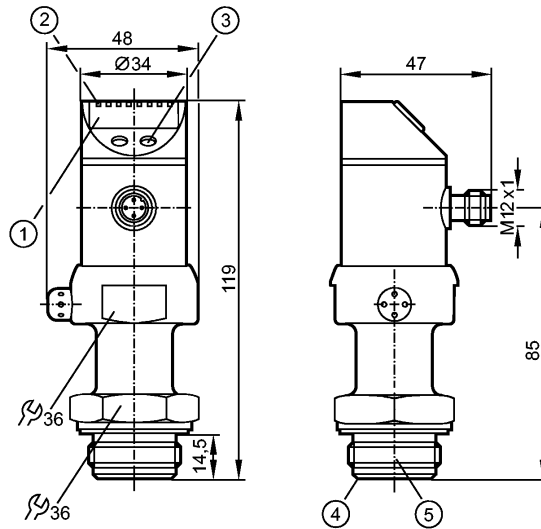


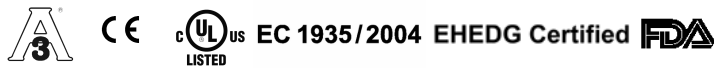
PI1094

PI-010-RES30-E-ZVG/US /

Pressure sensors



- 1: 4-digit alphanumeric display
- 2: status LEDs
- 3: Programming button
- 4: Aseptoflex sealing edge
- 5: Aseptoflex thread



Product characteristics

Programmable pressure transmitter
Quick disconnect
no dead space
Freely rotatable housing 350°
2-wire connection technology
Zero and span adjustable
Process connection: for Aseptoflex adapter
Analog output
4-digit alphanumeric display
Measuring range: -1.00...10.00 bar / -14.5...145.0 psi / -0.100...1.000 MPa

Application

Application	Type of pressure: relative pressure Hygienic systems, viscous media and liquids with suspended particles Liquids and gases		
Pressure rating	50 bar	725 psi	5 MPa
Bursting pressure min.	150 bar	2175 psi	15 MPa
Medium temperature [°C]	-25...125 (145 max. 1h)		

Electrical data

Electrical design	DC
Operating voltage [V]	20...32 DC
Switch-on peak current [mA]	60 (30 ms)
Insulation resistance [MΩ]	> 100 (500 V DC)
Protection class	III
Reverse polarity protection	yes

Outputs

Output	Analog output
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Pressure sensors

Output function	4...20 (20...4) mA analog (scaleable 1:4)
Overload protection	yes
Analog output	I: 4...20 mA (Ineg: 20...4 mA)
Max. load [Ω]	max. 300

Measuring / setting range

Display unit	bar, psi, MPa, % der Spanne		
Measuring range	-1.00...10.00 bar	-14.5...145.0 psi	-0.100...1.000 MPa
Setting range			
Analog start point, ASP	-1.00...7.25 bar	-14.5...105.1 psi	-0.100...0.725 MPa
Analog end point, AEP	1.75...10.00 bar	25.4...145.0 psi	0.175...1.000 MPa
in steps of	0.01 bar	0.1 psi	0.001 MPa
Factory setting	ASP = 0.00 bar; AEP = 10.00 bar		

Accuracy / deviations

Accuracy / deviations (in % of the span) Turn down 1:1			
Characteristics deviation *)	< ± 0.2		
Linearity	< ± 0.15		
Hysteresis	< ± 0.15		
Repeatability **)	< ± 0.1		
Long-term stability ***)	< ± 0.1		
Temperature coefficients (TEMPCO) in the temperature range 0...70° C (in % of the span per 10 K)			
Greatest TEMPCO of the zero point	< ± 0.05		
Greatest TEMPCO of the span	< ± 0.15		

Reaction times

Power-on delay time [s]	0.5
Damping for the analog output (dAA) [s]	0.1...100.0
Response time analog output [ms]	40
Integrated watchdog	yes

Environment

Ambient temperature [°C]	-25...80
Storage temperature [°C]	-40...100
Protection	IP 67 / IP 69K

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)
MTTF [Years]	238	

Mechanical data

Process connection	for Aseptoflex adapter
Materials (wetted parts)	ceramics (99.9 % Al ₂ O ₃); PTFE; stainless steel 316L / 1.4435; surface characteristics: Ra < 0.4 / Rz 4
Housing materials	stainless steel 316L / 1.4404; PC (Makrolon); PBT (Pocan); PEI; FPM (Viton); PTFE

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PI-010-RES30-E-ZVG/US/ /

Pressure sensors

Min. pressure cycles	100 million
Weight [kg]	0.4

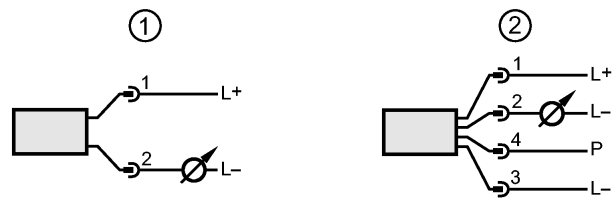
Displays / operating elements

Display	Display unit 4 x LED green Function display 4-digit alphanumeric display Measured values 4-digit alphanumeric display
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Electrical connection

Connection	M12 connector; gold-plated contacts
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Wiring



- 1: Normal operation
- 2: Programming operation (P = communication via EPS / FDT interface)

Remarks

Remarks	*) linearity, incl. hysteresis and repeatability; (limit value setting to DIN 16086) **) with temperature fluctuations < 10 K ***) in % of the span per year The 3-A qualification is only valid if adapters with 3-A qualification are used for installation.
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Pack quantity [piece]	1
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