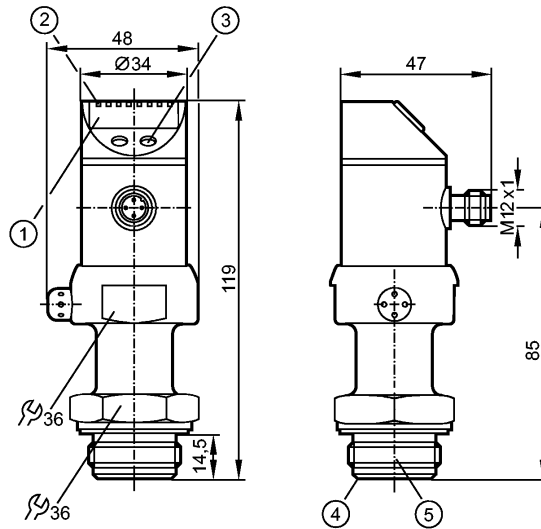


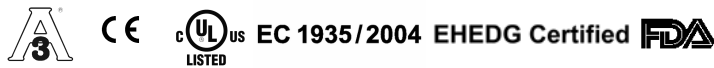
PI1099

PI-1-1BRES30-E-ZVG/US/ /P

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: -1000...1000 mbar

Application

Application	Type of pressure: relative pressure Hygienic systems, viscous media and liquids with suspended particles Liquids and gases
Pressure rating [mbar]	10000
Bursting pressure min. [mbar]	30000
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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PI1099

PI-1-1BRES30-E-ZVG/US/ /P

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	mbar, kPa, psi, inH2O, mWS, % der Spanne
Measuring range [mbar]	-1000...1000
Setting range	
Analog start point, ASP [mbar]	-1000...500
Analog end point, AEP [mbar]	-500...1000
in steps of [mbar]	1
Factory setting	ASP = -1000 mbar; AEP = 1000 mbar

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: 50 g (11 ms)
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 % Al2 O3); 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

PI1099

PI-1-1BRES30-E-ZVG/US/ /P

Pressure sensors

Min. pressure cycles	100 million
Weight [kg]	0.397

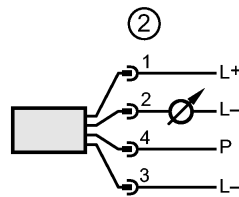
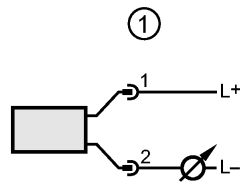
Displays / operating elements

Display	Display unit 6 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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