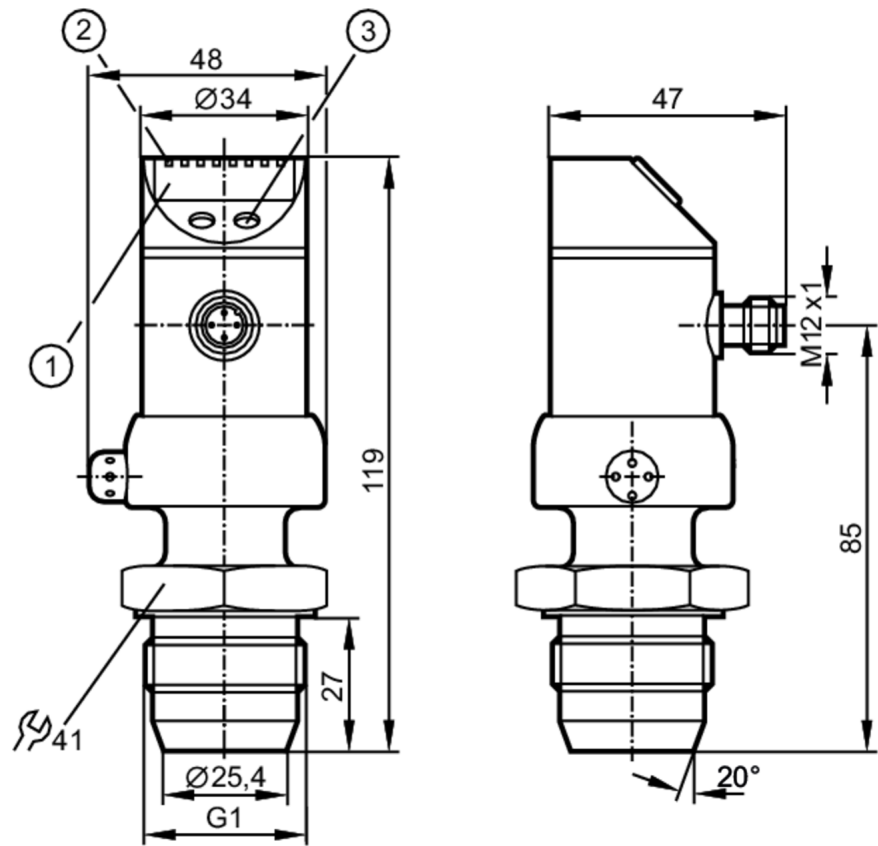


PI1689



Flush pressure sensor with display

PI-,10BREA01-E-ZVG/US/ /P



- 1 alphanumeric display 4-digit
- 2 status LEDs
- 3 programming button



Application

Application	hygienic systems
Installation	freely rotatable housing 350°
Media	viscous media and liquids with suspended particles; liquids and gases
Medium temperature [°C]	-25...125; (145 max. 1h)
Pressure rating [mbar]	4000
Min. bursting pressure [mbar]	30000
Type of pressure	relative pressure
No dead space	yes



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Electrical data			
Operating voltage	[V]	20...32 DC	
Min. insulation resistance	[MΩ]	100; (500 V DC)	
Protection class		III	
Reverse polarity protection		yes	
Power-on delay time	[s]	0.5	
Switch-on peak current	[mA]	6	
Einschaltspitzenstrom	[mA]	6	
Switch-on peak current duration	[ms]	30	
Integrated watchdog		yes	
Inputs / outputs			
Number of inputs and outputs		Number of analogue outputs: 1	
Outputs			
Total number of outputs		1	
Output signal		analogue signal	
Number of analogue outputs		1	
Analogue current output	[mA]	4...20, invertible; (scalable 1:4)	
Max. load	[Ω]	300	
Overload protection		yes	
Measuring/setting range			
Measuring range	[mbar]	-5...100	
Analogue start point	[mbar]	-5...75	
Analogue end point	[mbar]	20...100	
In steps of	[mbar]	0.1	
Factory setting		ASP =0.0 mbar	AEP = 100.0 mbar
Accuracy / deviations			
Repeatability	[% of the span]	< ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1)	
Characteristics deviation	[% of the span]	< ± 0,5; (Turn down 1:1 linearity, incl. hysteresis and repeatability limit value setting to DIN 16086)	
Linearity deviation	[% of the span]	< ± 0,15; (Turn down 1:1)	
Hysteresis deviation	[% of the span]	< ± 0,15; (Turn down 1:1)	
Long-term stability	[% of the span]	< ± 0,1; (Turn down 1:1; per year)	
Temperature coefficient zero point	[% of the span / 10 K]	< ± 0,1; (0...70 °C)	
Temperature coefficient span	[% of the span / 10 K]	< ± 0,2; (0...70 °C)	



Flush pressure sensor with display

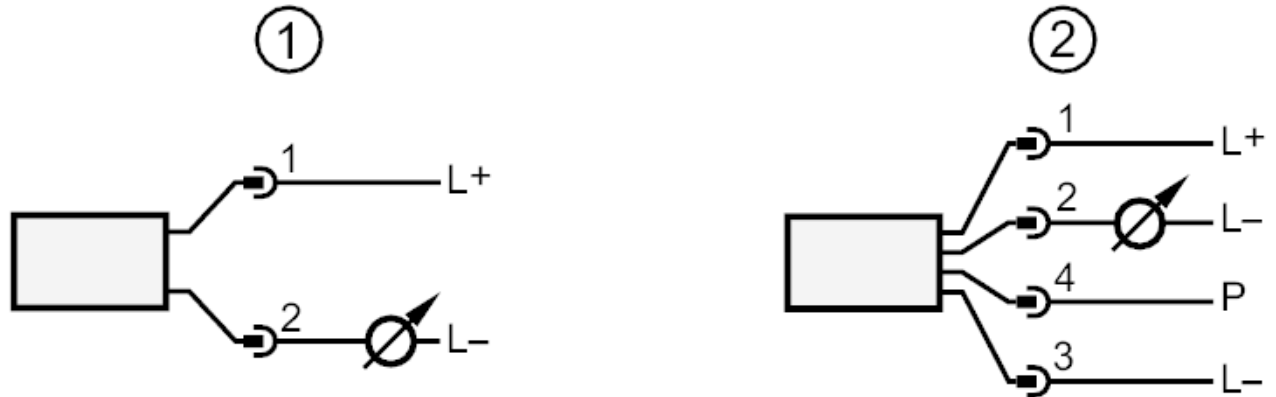
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Response times		
Damping for the analogue output dAA	[s]	0.1...100
Max. response time analogue output	[ms]	40
Software / programming		
Parameter setting options		zero point; span
Operating conditions		
Ambient temperature	[°C]	-25...80
Storage temperature	[°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]	259
Mechanical data		
Weight	[g]	438
Materials		stainless steel (1.4404 / 316L); PC; PBT; PEI; FKM; PTFE
Materials (wetted parts)		ceramics (99.9 % Al ₂ O ₃); PTFE; stainless steel (1.4435 / 316L); surface characteristics: Ra < 0,4 / Rz 4
Min. pressure cycles		100 million
Process connection		threaded connection G 1 external thread sealing cone
Displays / operating elements		
Display	Display unit	6 x LED, green
	function display	alphanumeric display, 4-digit
	measured values	alphanumeric display, 4-digit
Display unit		mbar; kPa; inH ₂ O; mmWS; % of the span
Remarks		
Remarks		The 3-A qualification is only valid if adapters with 3-A qualification are used for installation.
Notes		discontinued article
Pack quantity		1 pcs.
Electrical connection		
Connector: 1 x M12; Contacts: gold-plated		

Flush pressure sensor with display

PI-,10BREA01-E-ZVG/US/ /P

Connection



- 1: normal operation
- 2: programming operation (P = communication via EPS / FDT interface)