

Flush pressure sensor with display

PI-004-RES30-E-ZVG/US /P

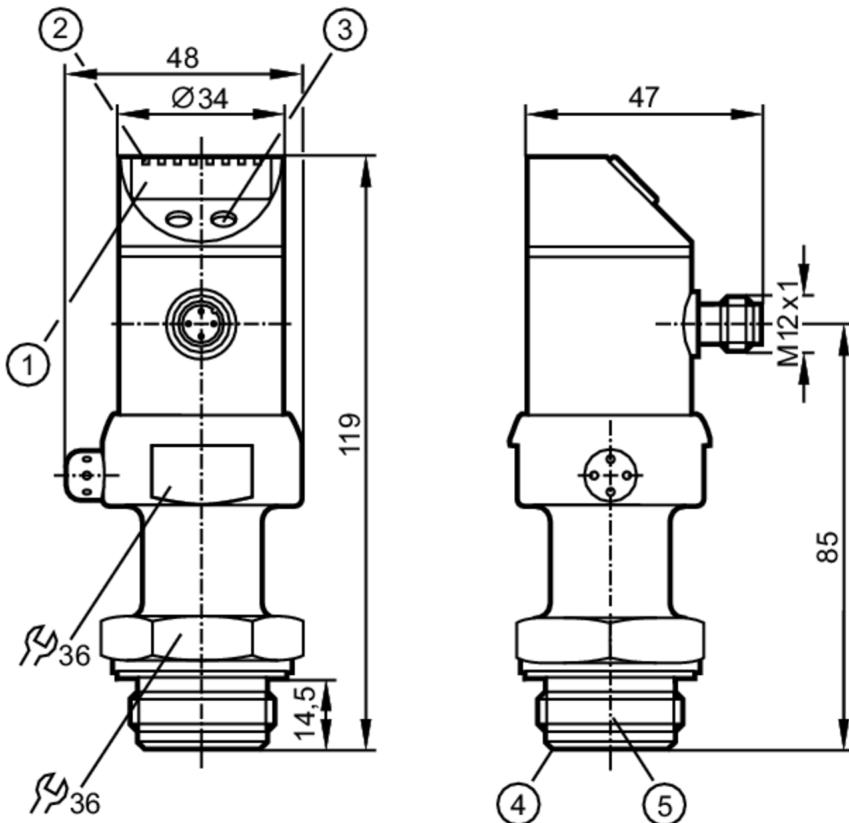
phase-out article

Discontinuation date: 03/31/2024

Alternative articles: PI1005 or PI1705

When selecting an alternative article and accessories please note that technical data may differ!

Please do not use for new projects.
no more adapters available as accessories



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



Product characteristics

Number of inputs and outputs	Number of analogue outputs: 1		
Measuring range	-1...4 bar	-14.5...58 psi	-100...400 kPa
Process connection	threaded connection Aseptoflex external thread Aseptoflex		

Application

Special feature	Gold-plated contacts
Application	flush mountable for the food and beverage industry
Installation	freely rotatable housing 350°
Media	viscous media and liquids with suspended particles; liquids and gases

PI1095



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Medium temperature	[°C]	-25...125; (145 max. 1h)			
Min. bursting pressure	100 bar	1450 psi	10000 kPa		
Pressure rating	30 bar	435 psi	3000 kPa		
Type of pressure	relative pressure				
No dead space	yes				
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			
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	-1...4 bar	-14.5...58 psi	-100...400 kPa		
Analogue start point	-1...3 bar	-14.5...43.5 psi	-100...300 kPa		
Analogue end point	0...4 bar	0...58 psi	0...400 kPa		
In steps of	0.005 bar	0.05 psi	0.5 kPa		
Factory setting	ASP = 0.000 bar		AEP = 4.000 bar		
Accuracy / deviations					
Repeatability	[% of the span]	< ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1)			
Characteristics deviation	[% of the span]	< ± 0,2; (Turn down 1:1 , linearity, incl. hysteresis and repeatability , limit value setting to DIN EN IEC 62828-1)			
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]	< ± 0,05; (0...70 °C)			
Temperature coefficient span	[% of the span / 10 K]	< ± 0,15; (0...70 °C)			

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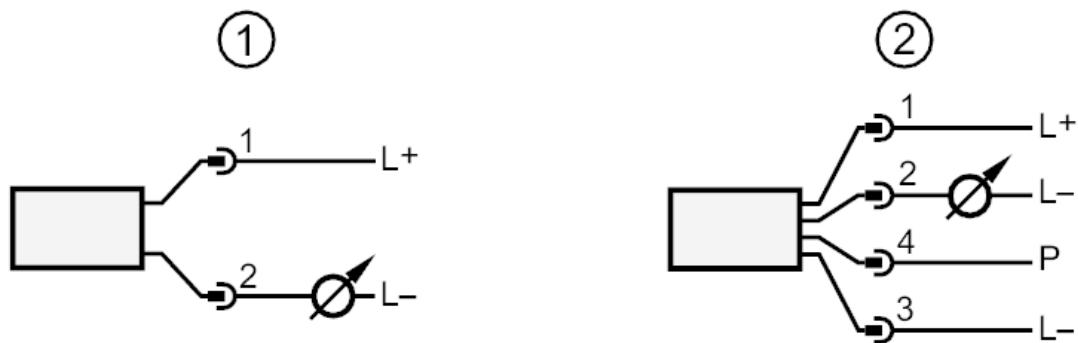
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Response times		
Damping for the analogue output dAA	[s]	0.1...100
Max. response time analogue output	[ms]	40
Software / programming		
Parameter setting options		zero point; span
Operating conditions		
Ambient temperature	[°C]	-25...80
Storage temperature	[°C]	-40...100
Protection		IP 67; IP 69K
Tests / approvals		
EMC		EN 61000-4-2 ESD EN 61000-4-3 HF radiated EN 61000-4-4 Burst EN 61000-4-5 Surge EN 61000-4-6 HF conducted
Shock resistance		DIN IEC 68-2-27
Vibration resistance		DIN IEC 68-2-6
MTTF [years]		238
Mechanical data		
Weight [g]		405
Materials		stainless steel (316L/1.4404); PC; PBT; PEI; FKM; PTFE
Materials (wetted parts)		ceramics (99.9 % Al2O3); stainless steel (316L/1.4435); surface characteristics: Ra < 0,4 / Rz 4; PTFE
Min. pressure cycles		100 million
Process connection		threaded connection Aseptoflex external thread Aseptoflex
Displays / operating elements		
Display		Display unit function display measured values
Display unit		bar; psi; kPa; % of the span
Remarks		
Remarks		The 3-A qualification is only valid if adapters with 3-A qualification are used for installation.
Notes		Please do not use for new projects.; no more adapters available as accessories
Pack quantity		1 pcs.
Electrical connection		
Connector: 1 x M12; coding: A; Contacts: gold-plated		

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Connection



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