



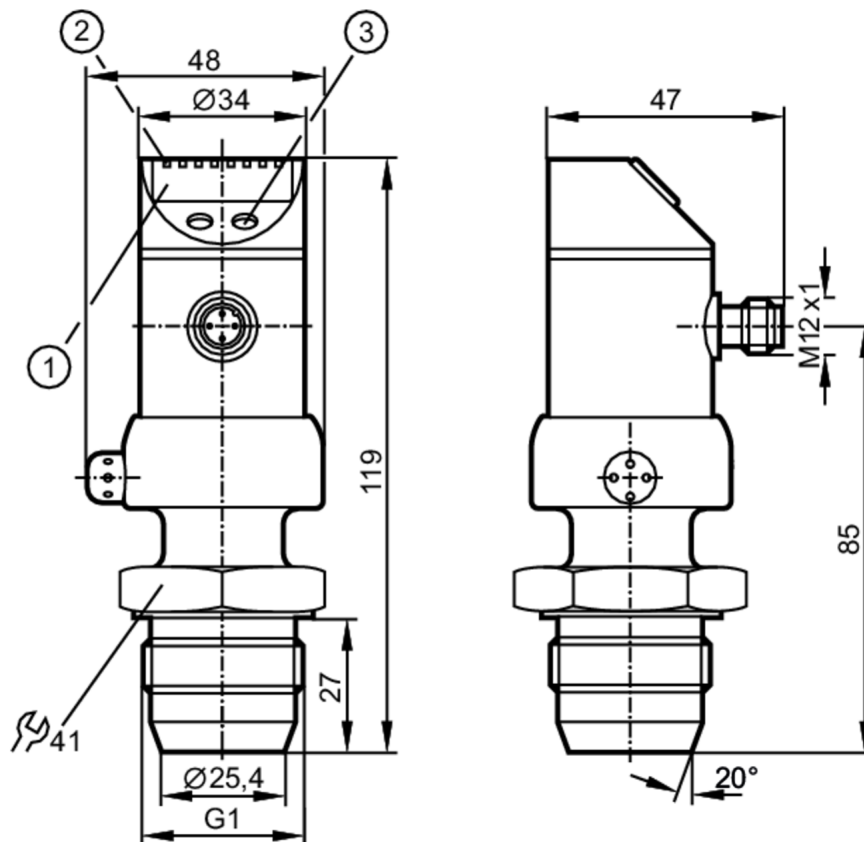
Flush pressure sensor with display

PI-100-REA01-MFRKG/US/ IP

Article no longer available - archive entry

Alternative articles: PI2602

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



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



EHEDG Tested



Product characteristics

Number of inputs and outputs	Number of digital outputs: 1; Number of analogue outputs: 1		
Measuring range	-1...100 bar	-15...1450 psi	-0.1...10 MPa
Process connection	threaded connection G 1 external thread sealing cone		

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		
Conditionally suitable for	use in gases at pressures > 25 bar only on request		
Medium temperature [°C]	-25...125; (145 max. 1h)		
Min. bursting pressure	650 bar	9425 psi	65 MPa
Pressure rating	200 bar	2900 psi	20 MPa
Type of pressure	relative pressure		



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No dead space	yes		
Electrical data			
Operating voltage	[V]	18...32 DC	
Current consumption	[mA]	< 50	
Min. insulation resistance	[MΩ]	100; (500 V DC)	
Protection class		III	
Reverse polarity protection		yes	
Power-on delay time	[s]	0.5	
Integrated watchdog		yes	
Inputs / outputs			
Number of inputs and outputs		Number of digital outputs: 1; Number of analogue outputs: 1	
Outputs			
Total number of outputs		2	
Output signal		switching signal; analogue signal; (configurable)	
Electrical design		PNP/NPN	
Number of digital outputs		1	
Output function		normally open / normally closed; (parameterisable)	
Max. voltage drop switching output DC	[V]	2	
Permanent current rating of switching output DC	[mA]	250	
Switching frequency DC	[Hz]	6	
Number of analogue outputs		1	
Analogue current output	[mA]	4...20, invertible; (scalable 1:4)	
Max. load	[Ω]	(U _b - 10 V) / 20 mA	
Analogue voltage output	[V]	0...10, invertible; (scalable 1:4)	
Min. load resistance	[Ω]	2000	
Short-circuit protection		yes	
Type of short-circuit protection		pulsed	
Overload protection		yes	
Measuring/setting range			
Measuring range	-1...100 bar	-15...1450 psi	-0.1...10 MPa
Set point SP	-0.8...100 bar	-13...1450 psi	-0.08...10 MPa
Reset point rP	-1...99.8 bar	-15...1448 psi	-0.1...9.98 MPa
Analogue start point	-1...75 bar	-15...1088 psi	-0.1...7.5 MPa
Analogue end point	24...100 bar	348...1450 psi	2.4...10 MPa
In steps of	0.1 bar	1 psi	0.01 MPa
Factory setting		SP1 = 25.0 bar	rP1 = 23.0 bar
		ASP = 0.0 bar	AEP = 100.0 bar
Accuracy / deviations			
Switch point accuracy	[X21]	< ± 0,5; (Turn down 1:1)	
Repeatability	[X21]	< ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1)	
Characteristics deviation	[X21]	< ± 0,5; (Turn down 1:1 , linearity, incl. hysteresis and repeatability , limit value setting to DIN EN IEC 62828-1)	



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Linearity deviation	[X21]	< ± 0,15; (Turn down 1:1)	
Hysteresis deviation	[X21]	< ± 0,15; (Turn down 1:1)	
Long-term stability	[X21]	< ± 0,1; (Turn down 1:1; per year)	
Temperature coefficient zero point	[X22]	< ± 0,2; (0...70 °C)	
Temperature coefficient span	[X22]	< ± 0,2; (0...70 °C)	
Response times			
Response time	[ms]	< 100	
Damping process value dAP	[s]	0.1...100	
Damping for the analogue output dAA	[s]	0.1...100	
Step response time analogue output	[ms]	25	
Software / programming			
Parameter setting options	hysteresis / window; normally open / normally closed; switching logic; current/voltage output; Damping; adaptation of displayed values; display can be rotated and switched off; Display unit; 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)	
Mechanical data			
Weight	[g]	456	
Materials	stainless steel (1.4404 / 316L); PC; PBT; PEI; FKM; PTFE		
Materials (wetted parts)	ceramics; 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	4 x LED, green	
	switching status	LED, yellow	
	function display	alphanumeric display, 4-digit	
	measured values	alphanumeric display, 4-digit	
Display unit	bar; psi; MPa; % of the span		
Remarks			
Remarks	The 3-A qualification is only valid if adapters with 3-A qualification are used for installation.		
Pack quantity	1 pcs.		



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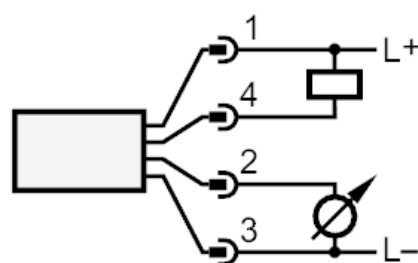
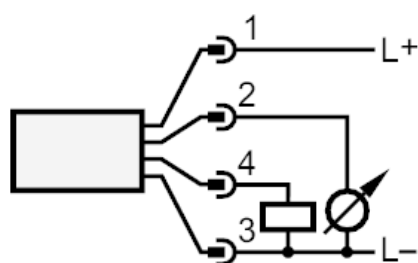
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Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection



OUT1
OUT2

switching output
analogue output