PI2667

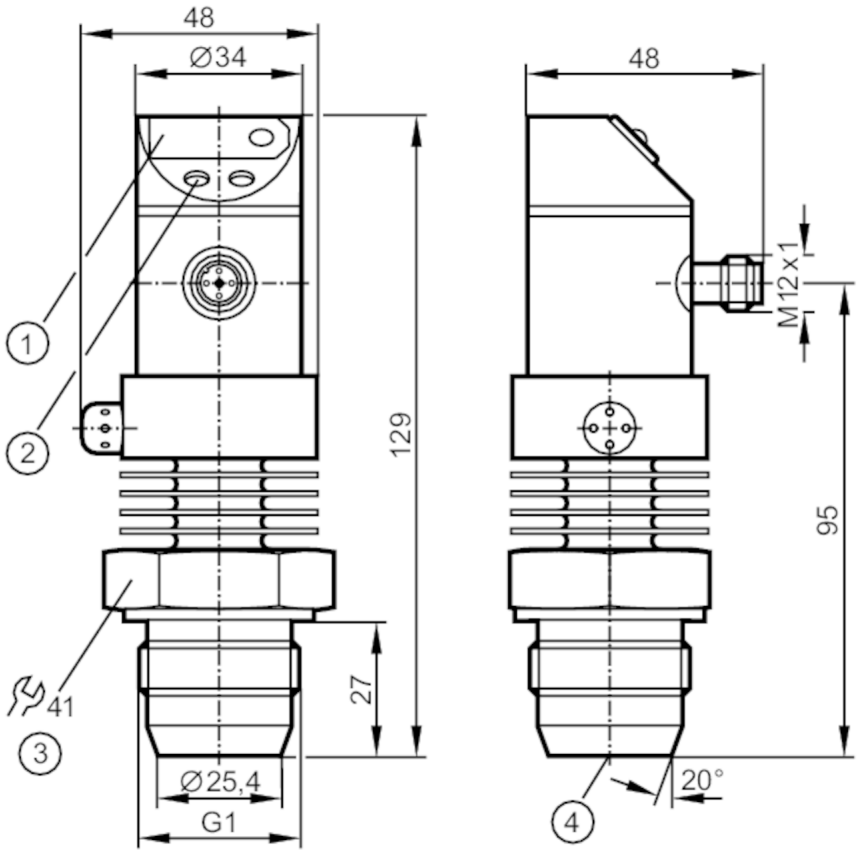
Flush pressure sensor with display

PI-001BREA01-MFRKG/US/ /P

Article no longer available - archive entry

Alternative articles: PI1697

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



1 7-segment LED display
2 programming button
3 Tightening torque 20 Nm
4 diaphragm : PTFE

Product characteristics			
Number of inputs and outputs	Number of digital outputs: 2; Number of analogue outputs: 1		
Measuring range	-50...1000 mbar	-0.7...14.5 psi	-5...100 kPa
Process connection	threaded connection G 1 external thread		
Application			
Special feature	Gold-plated contacts		
Application	flush mountable for the food and beverage industry		
Installation	freely rotatable housing 350°		
Media	liquid and viscous media		
Medium temperature [°C]	-25...125; (145 max. 1h)		
Min. bursting pressure	30000 mbar	450 psi	3000 kPa
Pressure rating	10000 mbar	145 psi	1000 kPa
Type of pressure	relative pressure		

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No dead space		yes		
Electrical data				
Operating voltage	[V]	20...30 DC; ("supply class 2" to cULus)		
Current consumption	[mA]	< 60		
Min. insulation resistance	[MΩ]	100; (500 V DC)		
Protection class		III		
Reverse polarity protection		yes		
Power-on delay time	[s]	0.2		
Integrated watchdog		yes		
Inputs / outputs				
Number of inputs and outputs		Number of digital outputs: 2; 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		2		
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]	< 170		
Number of analogue outputs		1		
Analogue current output	[mA]	4...20; (scalable 1:4)		
Max. load	[Ω]	(Ub - 10 V) / 20 mA		
Analogue voltage output	[V]	0...10; (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		-50...1000 mbar	-0.7...14.5 psi	-5...100 kPa
Set point SP		-45...999 mbar	-0.7...14.5 psi	-4.5...99.9 kPa
Reset point rP		-50...994 mbar	-0.7...14.4 psi	-5...99.4 kPa
Analogue start point		-50...749 mbar	-0.7...10.9 psi	-5...74.9 kPa
Analogue end point		200...999 mbar	2.9...14.5 psi	20...99.9 kPa
In steps of		1 mbar	0.1 psi	0.1 kPa
Accuracy / deviations				
Repeatability	[% of the span]	< ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1)		
Characteristics deviation	[% of the span]	< ± 0,6; (Turn down 1:1 , linearity, incl. hysteresis and repeatability , limit value setting to DIN EN IEC 62828-1)		
Linearity deviation	[% of the span]	< ± 0,5; (Turn down 1:1)		
Hysteresis deviation		< ± 0,1; (Turn down 1:1)		

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[% of the span]		
Long-term stability [% of the span]		< ± 0,1; (Turn down 1:1; per year)
Temperature coefficient zero point [% of the span / 10 K]		< ± 0,15; (0...80 °C)
Temperature coefficient span [% of the span / 10 K]		< ± 0,4; (0...80 °C)
Response times		
Response time [ms]		< 3
Damping process value dAP [s]		0...4
Damping for the analogue output dAA in steps [s]		0 - 0,1 - 0,5 - 2
Max. response time analogue output [ms]		3
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
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 61000-4-6 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		
Materials		stainless steel (1.4404 / 316L); PBT; PC; PA; EPDM/X; FKM
Materials (wetted parts)		stainless steel (1.4435 / 316L); PTFE on ceramic substrate; PTFE
Min. pressure cycles		100 million
Process connection		threaded connection G 1 external thread
Displays / operating elements		
Display	switching status	2 x LED, red
	function display	7-segment LED display
	measured values	7-segment LED display
Display unit		mbar; psi; kPa
Remarks		
Pack quantity		1 pcs.

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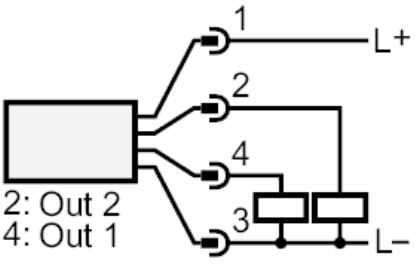
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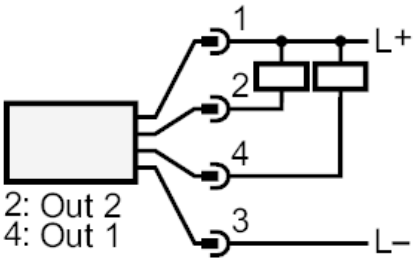
Electrical connection

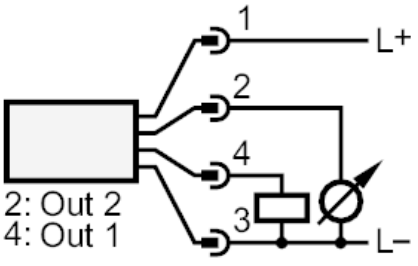
Connector: 1 x M12; coding: A; Contacts: gold-plated

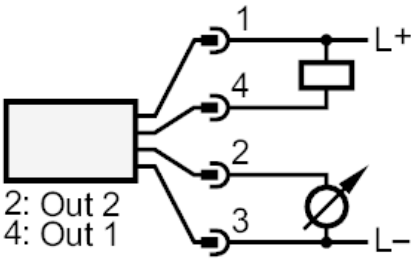


Connection









OUT1	switching output
OUT2	switching output analogue output