

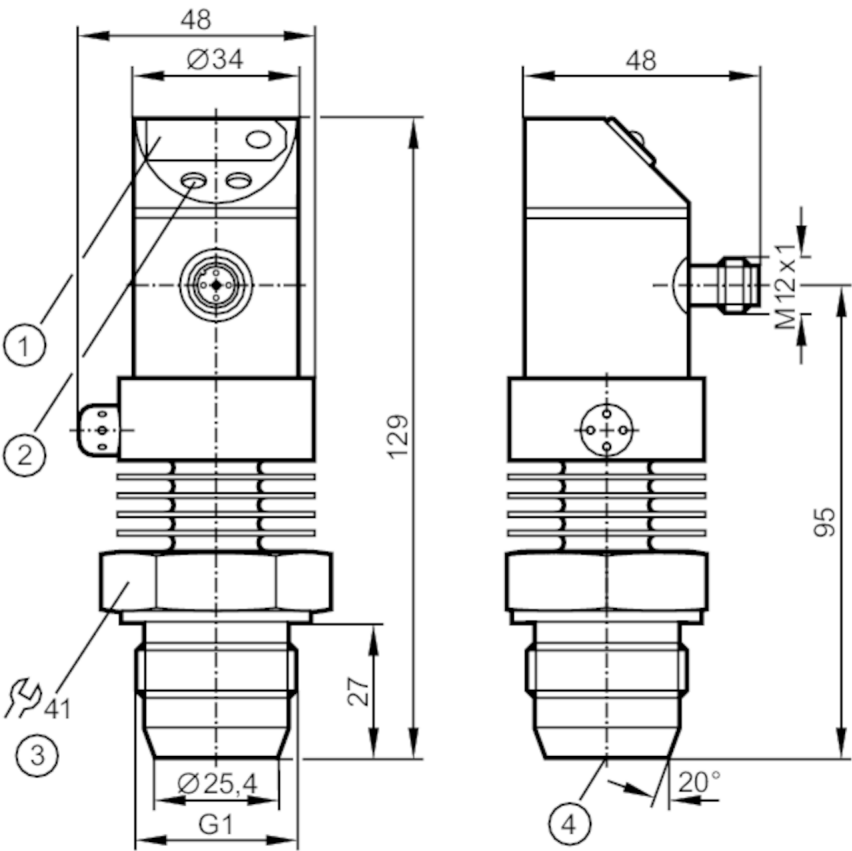


Flush pressure sensor with display

PI-010-REA01-MFRKG/US/ IP

Article no longer available - archive entry

Alternative articles: PI2694 or PI1694
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	-0.5...10 bar	-7...145 psi	-50...1000 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	150 bar	2175 psi	15000 kPa
Pressure rating	50 bar	725 psi	5000 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	-0.5...10 bar	-7...145 psi	-50...1000 kPa
Set point SP	-0.45...9.99 bar	-7...145 psi	-45...999 kPa
Reset point rP	-0.5...9.94 bar	-7...144 psi	-50...994 kPa
Analogue start point	-0.5...7.49 bar	-7...109 psi	-50...749 kPa
Analogue end point	2...9.99 bar	29...145 psi	200...999 kPa
In steps of	0.01 bar	1 psi	1 kPa
Accuracy / deviations			
Repeatability	[X21]	< ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1)	
Characteristics deviation	[X21]	< ± 0,6; (Turn down 1:1, linearity, incl. hysteresis and repeatability, limit value setting to DIN EN IEC 62828-1)	
Linearity deviation	[X21]	< ± 0,5; (Turn down 1:1)	
Hysteresis deviation	[X21]	< ± 0,1; (Turn down 1:1)	
Long-term stability	[X21]	< ± 0,1; (Turn down 1:1; per year)	



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Temperature coefficient zero point [X22]	$< \pm 0,15; (0...80\text{ }^{\circ}\text{C})$
Temperature coefficient span [X22]	$< \pm 0,4; (0...80\text{ }^{\circ}\text{C})$

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
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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	bar; psi; kPa	

Remarks

Pack quantity	1 pcs.
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Electrical connection

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

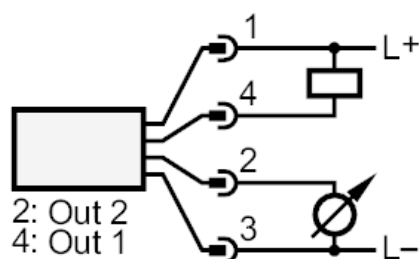
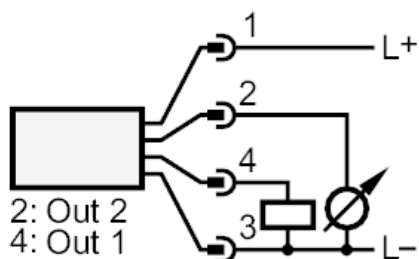
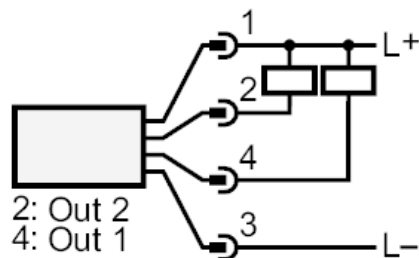
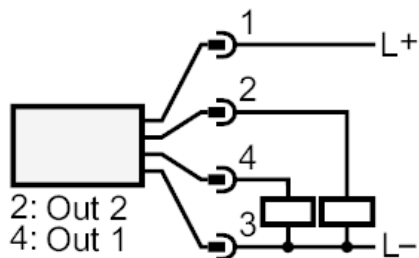




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Connection



OUT1
OUT2

switching output
switching output
analogue output