



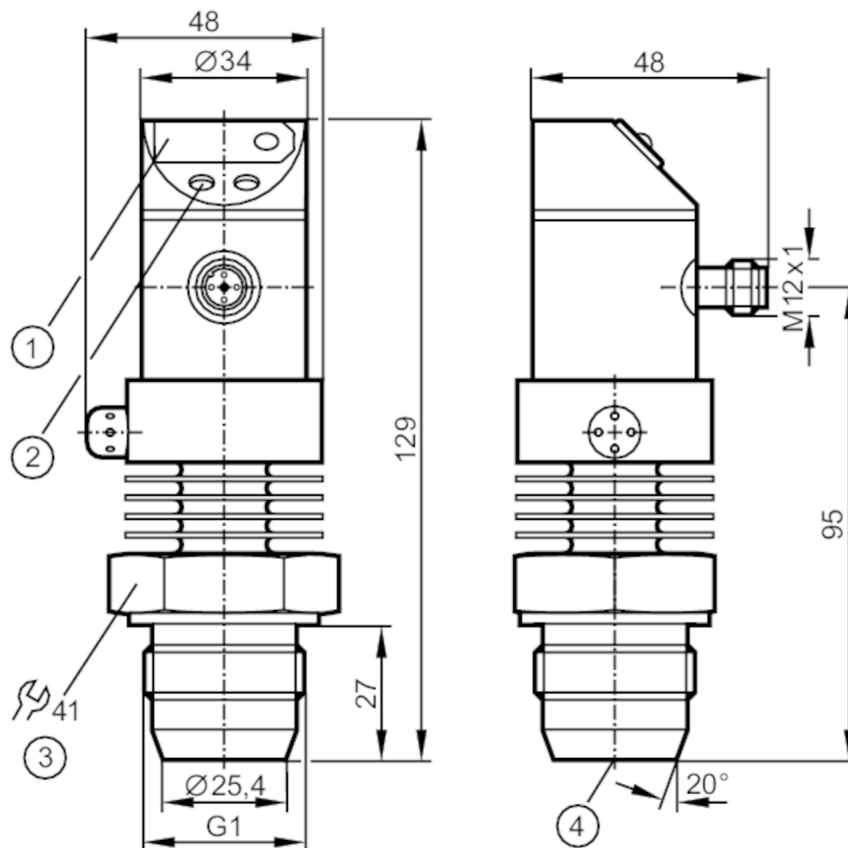
Flush pressure sensor with display

PI-2,5-REA01-MFRKG/US/ /P

Article no longer available - archive entry

Alternative articles: PI1696

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	-0.13...2.5 bar	-1.8...36.3 psi	-13...250 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	50 bar	725 psi	5000 kPa
Pressure rating	20 bar	290 psi	2000 kPa
Type of pressure	relative pressure		



Flush pressure sensor with display

PI-2,5-REA01-MFRKG/US/ /P

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]	(U _b - 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	-0.13...2.5 bar	-1.8...36.3 psi	-13...250 kPa
Set point SP	-0.11...2.5 bar	-1.6...36.3 psi	-11...250 kPa
Reset point rP	-0.12...2.49 bar	-1.7...36.2 psi	-12...249 kPa
Analogue start point	-0.13...1.88 bar	-1.8...27.2 psi	-13...188 kPa
Analogue end point	0.5...2.5 bar	7.3...36.3 psi	50...250 kPa
In steps of	0.01 bar	0.1 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)



Flush pressure sensor with display

PI-2,5-REA01-MFRKG/US/ /P

Temperature coefficient zero point [X22]	< ± 0,15; (0...80 °C)
Temperature coefficient span [X22]	< ± 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	bar; psi; kPa	

Remarks	
Pack quantity	1 pcs.

Electrical connection

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

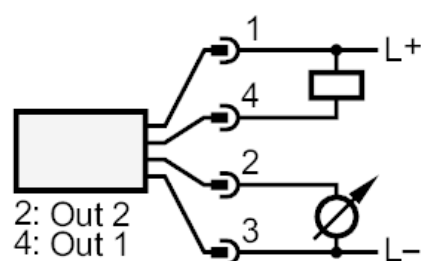
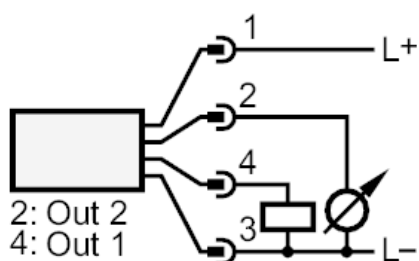
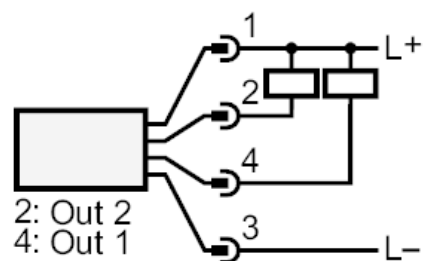
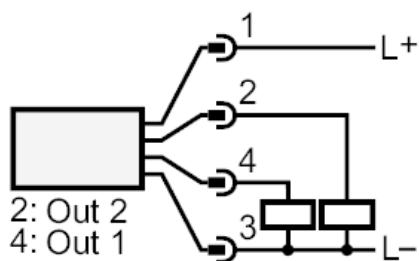




Flush pressure sensor with display

PI-2,5-REA01-MFRKG/US/ /P

Connection



OUT1
OUT2

switching output
switching output
analogue output