

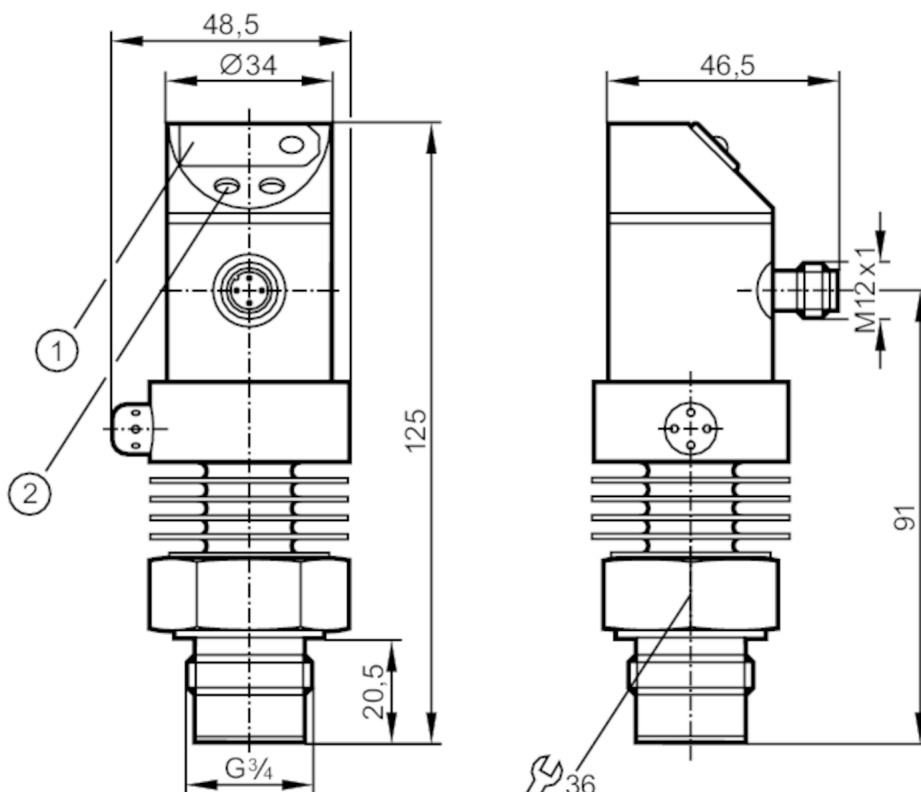
Flush pressure sensor with display

PI-025-REB34-MFRKG/US/ IP

Article no longer available - archive entry

Alternative articles: PI2993 or PI7993

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



- 1 7-segment LED display
- 2 programming button



Product characteristics

Number of inputs and outputs	Number of digital outputs: 2; Number of analogue outputs: 1		
Measuring range	-1...25 bar	-15...363 psi	-0.1...2.5 MPa
Process connection	threaded connection G 3/4 external thread		

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		
Medium temperature [°C]	-25...125; (145 max. 1h)		
Min. bursting pressure	200 bar	2900 psi	20 MPa
Pressure rating	100 bar	1450 psi	10 MPa
Type of pressure	relative pressure		
No dead space	yes		

Electrical data

Operating voltage [V]	20...30 DC
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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
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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	-1...25 bar	-15...363 psi	-0.1...2.5 MPa
Set point SP	-0.8...25 bar	-12...363 psi	-0.08...2.5 MPa
Reset point rP	-0.9...24.9 bar	-13...362 psi	-0.09...2.49 MPa
Analogue start point	-1...18.8 bar	-15...272 psi	-0.1...1.88 MPa
Analogue end point	5.3...25 bar	76...363 psi	0.53...2.5 MPa
In steps of	0.1 bar	1 psi	0.01 MPa

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)
Temperature coefficient zero point	[X22]	< ± 0,1; (0...80 °C)
Temperature coefficient span	[X22]	< ± 0,2; (0...80 °C)



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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; PEI; EPDM/X; FKM	
Materials (wetted parts)	stainless steel (1.4404 / 316L); ceramics (99.9 % Al ₂ O ₃); PTFE; FKM	
Min. pressure cycles	100 million	
Process connection	threaded connection G 3/4 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; MPa	

Remarks		
Pack quantity	1 pcs.	

Electrical connection

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

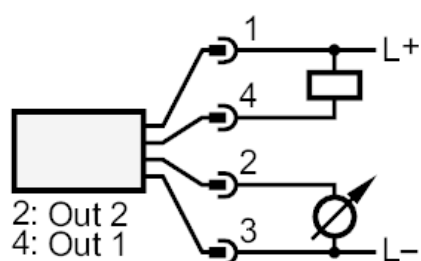




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Connection



OUT1
OUT2

switching output
switching output
analogue output