PI2966

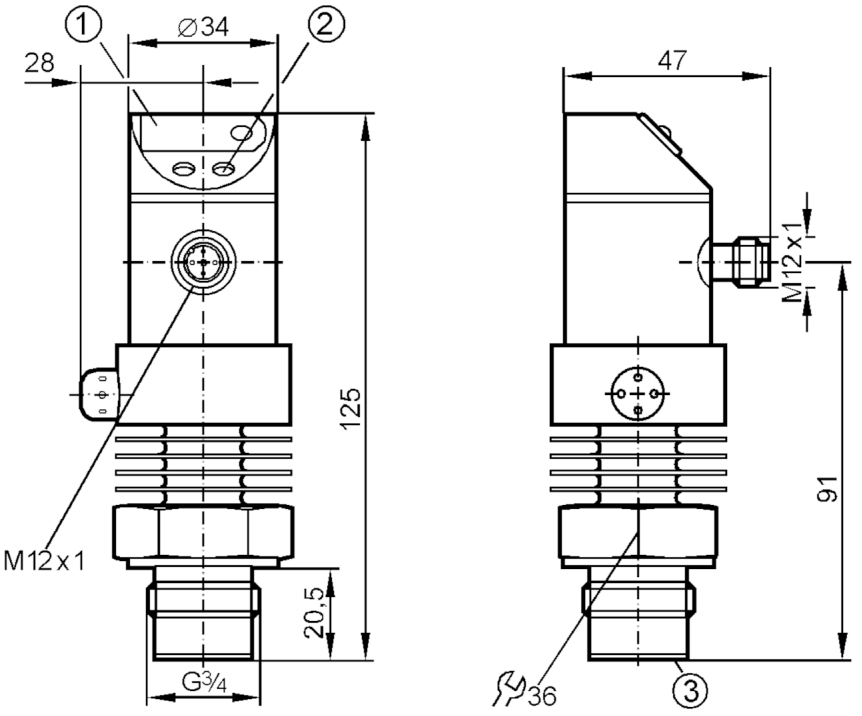
Flush pressure sensor with display

PI-2,5-REB34-MFRKG/US/ /P

Article no longer available - archive entry

Alternative articles: PI2996

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



1 7-segment LED display
2 programming button
3 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 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	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		
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)		

PI2966

Flush pressure sensor with display

PI-2,5-REB34-MFRKG/US/ /P

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		-0.13...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	[% 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	[% of the span]	< ± 0,1; (Turn down 1:1)
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)

PI2966

Flush pressure sensor with display

PI-2,5-REB34-MFRKG/US/ /P

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 (1.4404 / 316L); PTFE on ceramic substrate; 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; kPa	
Remarks			
Pack quantity		1 pcs.	

Electrical connection

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

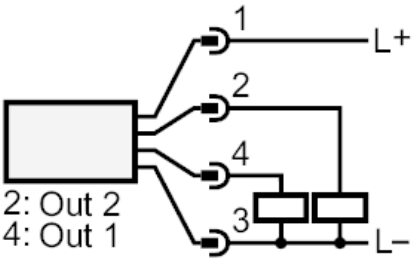


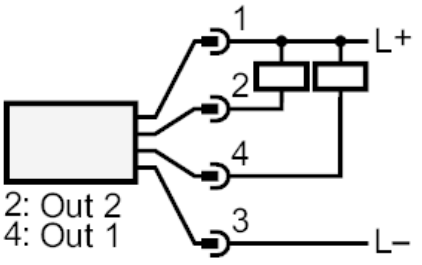
PI2966

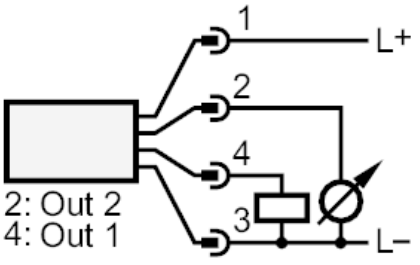
Flush pressure sensor with display

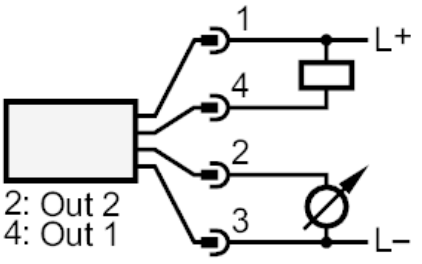
PI-2,5-REB34-MFRKG/US/ /P

Connection









OUT1	switching output
OUT2	switching output analogue output