



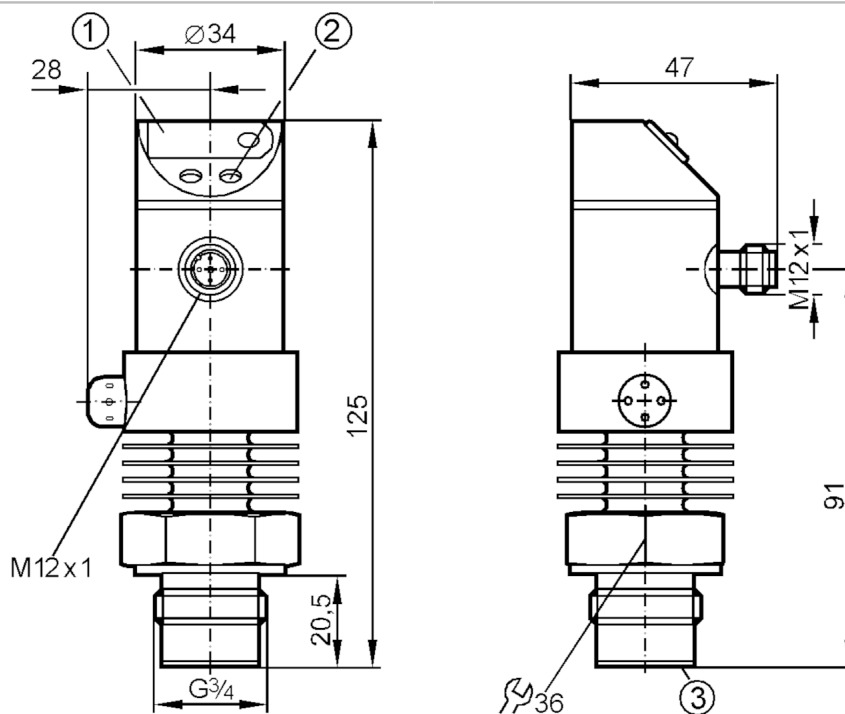
Flush pressure sensor with display

PI-010-REB34-MFRKG/US/ IP

Article no longer available - archive entry

Alternative articles: PI2994

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 analog outputs: 1		
Measuring range	-0.5...10 bar	-7...145 psi	-50...1000 kPa
Process connection	threaded connection G 3/4 external thread		

Application

System	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		
No dead space	yes		

Electrical data

Operating voltage [V]	20...30 DC; (cULus - Class 2 source required)		
Current consumption [mA]	< 60		
Min. insulation resistance [MΩ]	100; (500 V DC)		



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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 analog outputs: 1		
Outputs			
Total number of outputs	2		
Output signal	switching signal; analog signal; (configurable)		
Electrical design	PNP/NPN		
Number of digital outputs	2		
Output function	normally open / closed; (configurable)		
Max. voltage drop switching output DC [V]	2		
Permanent current rating of switching output DC [mA]	250		
Switching frequency DC [Hz]	< 170		
Number of analog outputs	1		
Analog current output [mA]	4...20; (scalable 1:4)		
Max. load [Ω]	(U _b - 10 V) / 20 mA		
Analog voltage output [V]	0...10; (scalable 1:4)		
Min. load resistance [Ω]	2000		
Short-circuit protection	yes		
Type of short-circuit protection	yes (non-latching)		
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
Analog start point	-0.5...7.49 bar	-7...109 psi	-50...749 kPa
Analog 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 [% 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)		



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Temperature coefficient span [% of the span / 10 K]	< ± 0,4; (0...80 °C)	
Reaction times		
Response time [ms]	< 3	
Damping process value dAP [s]	0...4	
Damping for the analog output dAA in steps [s]	0 - 0,1 - 0,5 - 2	
Max. response time analog output [ms]	3	
Software / programming		
Parameter setting options	hysteresis / window; normally open / 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		
Material	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		
		



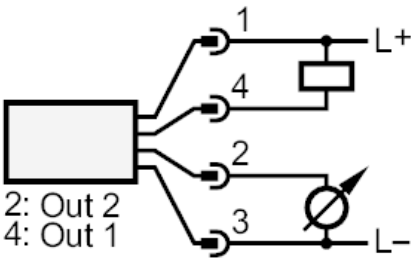
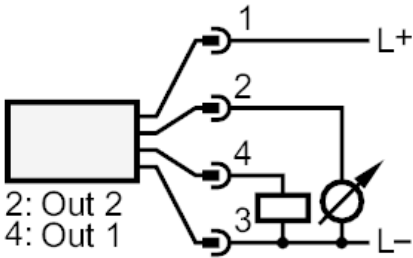
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Connection



OUT1 Switching output
OUT2 Switching output
 analog output