

PF2954



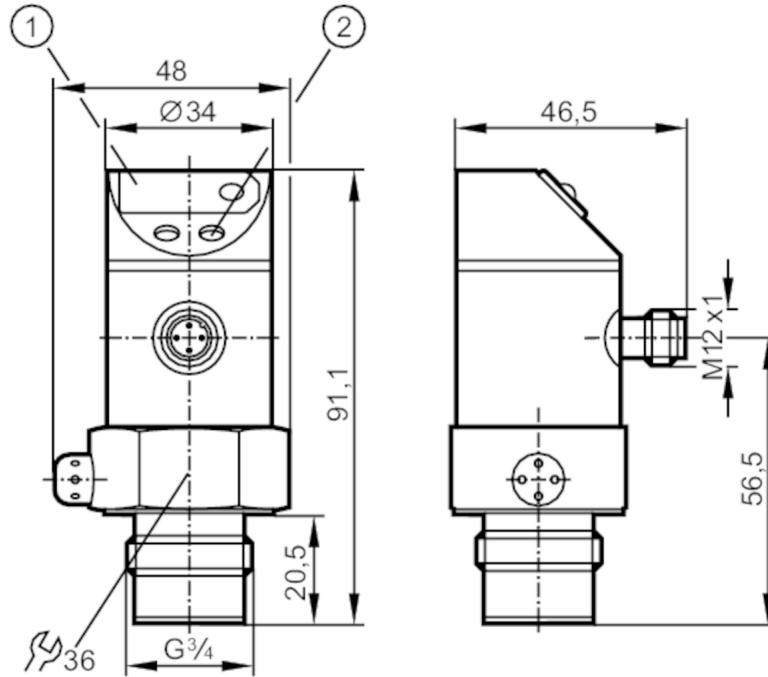
Flush pressure sensor

PF-010-REB34-MFRKG/US/ IP

Article to be discontinued

Alternative articles: PM1504 + E30482

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 analog outputs: 1			
Measuring range	-0.5...10 bar	-7...145 psi	-50...1000 kPa	-0.05...1 MPa
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	viscous media and liquids with suspended particles; liquids and gases			
Medium temperature [°C]	-25...80			
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			

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Electrical data	
Operating voltage [V]	20...30 DC
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 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	-0.05...1 MPa
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
Factory setting		SP1 = 2.50 bar		rP1 = 2.30 bar
		ASP = 0.00 bar		AEP = 9.99 bar

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	< ± 0,1; (Turn down 1:1)

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	[% of the span]	
Long-term stability	[% of the span]	< ± 0,1; (Turn down 1:1; per year)
Temperature coefficient zero point	[% of the span / 10 K]	< ± 0,1; (0...80 °C)
Temperature coefficient span	[% of the span / 10 K]	< ± 0,2; (0...80 °C)

Reaction times		
Response time	[ms]	< 3
Damping for the switching output 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)
MTTF	[years]	170

Mechanical data		
Weight	[g]	308.5
Material		stainless steel (1.4404 / 316L); PBT; PC; PEI; EPDM/X; FKM
Materials (wetted parts)		ceramics (99.9 % Al ₂ O ₃); stainless steel (1.4435 / 316L); surface characteristics: Ra < 0,4 / Rz 4; FKM; PTFE
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	
Notes	Article to be discontinued
Pack quantity	1 pcs.

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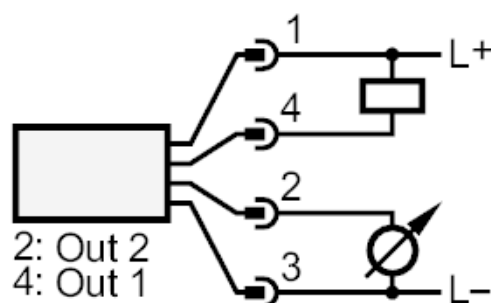
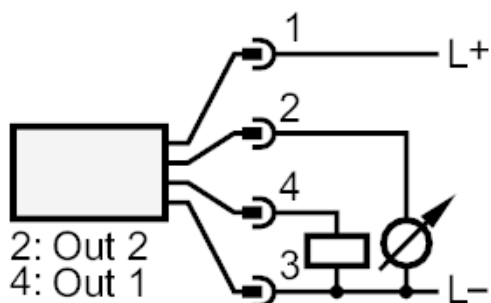
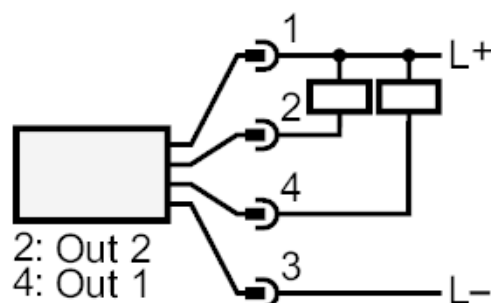
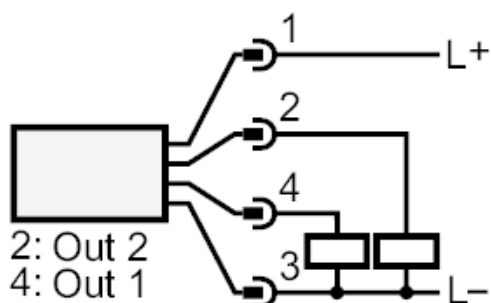
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Electrical connection

Connector: 1 x M12; Contacts: gold-plated



Connection



- OUT1 Switching output
- OUT2 Switching output
- analog output