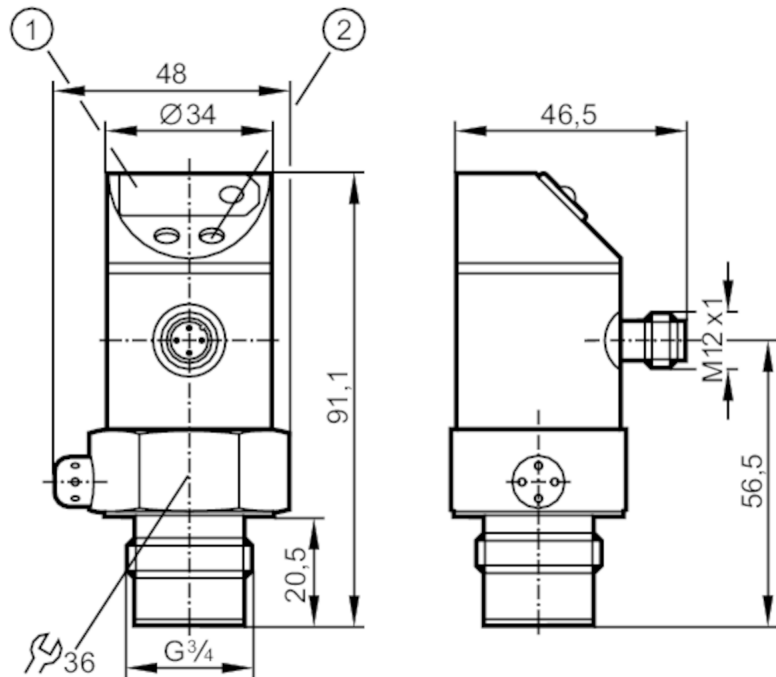


PF2956



Flush pressure sensor

PF-2,5-REB34-MFRKG/US/ IP



- 1 7-segment LED display
- 2 programming button



Product characteristics

Output signal	switching signal; analogue signal; (configurable)			
Measuring range	-0.13...2.5 bar	-130...2500 mbar	-1.8...36.3 psi	-13...250 kPa
Process connection	threaded connection G 3/4 external thread			

Application

Special feature	Gold-plated contacts		
Application	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		
Pressure rating	20 bar	290 psi	2000 kPa
Min. bursting pressure	50 bar	725 psi	5000 kPa
Type of pressure	relative pressure		
No dead space	yes		

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



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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	-130...2500 mbar	-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
Factory setting			SP1 = 0.63 bar ASP = 0.00 bar	rP1 = 0.58 bar AEP = 2.50 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 16086)			
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]	< ± 0,1; (0...80 °C)			
Temperature coefficient span [% of the span / 10 K]	< ± 0,2; (0...80 °C)			

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Response times		
Response time [ms]	< 3	
Damping for the switching output 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)
MTTF [years]	170	
Mechanical data		
Weight [g]	308.5	
Materials	stainless steel (1.4404 / 316L); PBT; PC; PEI; EPDM/X; FKM	
Materials (wetted parts)	ceramics (99.9 % Al ₂ O ₃); PTFE; FKM; stainless steel (1.4435 / 316L); surface characteristics: Ra < 0,4 / Rz 4	
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; Contacts: gold-plated		

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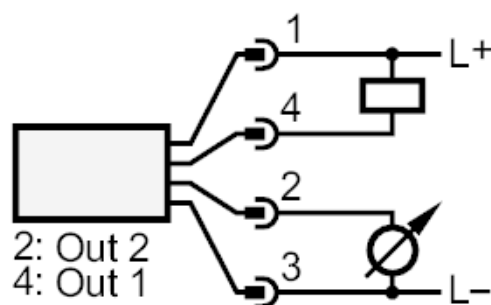
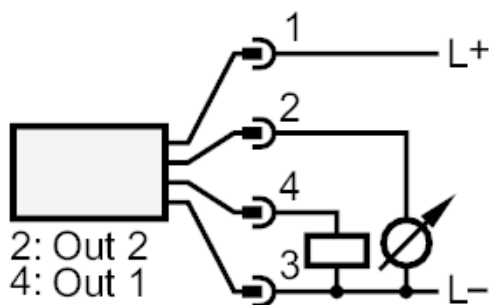
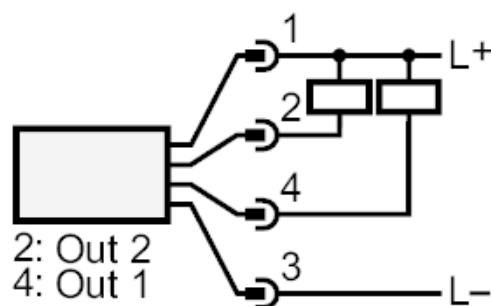
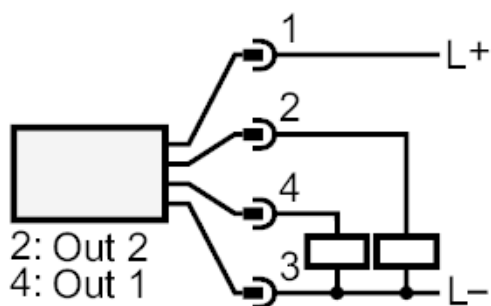


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Connection



OUT1	switching output
OUT2	switching output
	analogue output