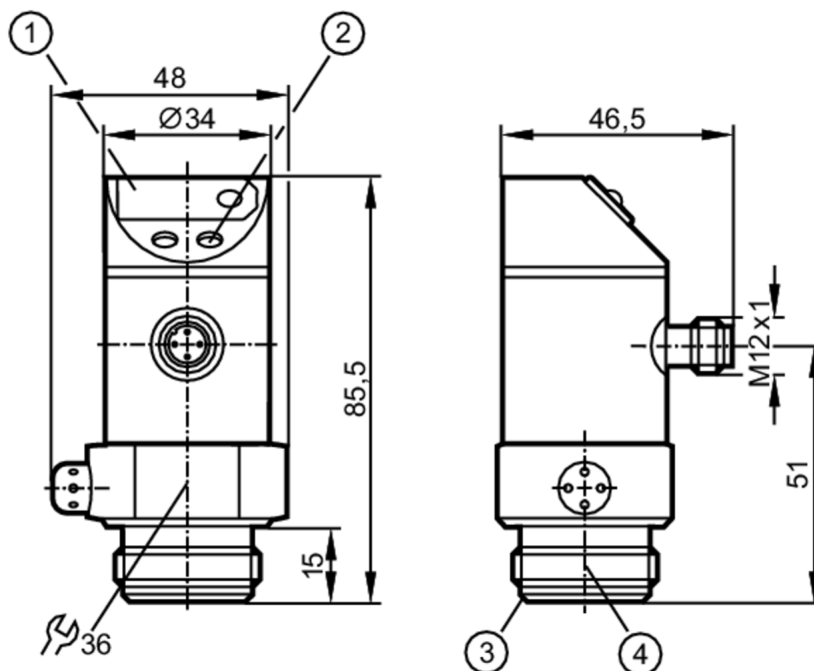


PF2054



Flush pressure sensor

PF-010-RES30-MFRKG/US/ /P



- 1 7-segment LED display
- 2 programming button
- 3 Aseptoflex sealing edge
- 4 Aseptoflex thread



EC 1935/2004 EHEDG Certified



Application

Application	hygienic systems		
Installation	freely rotatable housing 350°		
Media	viscous media and liquids with suspended particles; liquids and gases		
Medium temperature [°C]	-25...80		
Pressure rating	50 bar	725 psi	5000 kPa
Min. bursting pressure	150 bar	2175 psi	15000 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

Inputs / outputs

Number of inputs and outputs	Number of digital outputs: 2; Number of analogue outputs: 1
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Flush pressure sensor

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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	-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
Analogue start point	-0.5...7.49 bar	-7...109 psi	-50...749 kPa
Analogue 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 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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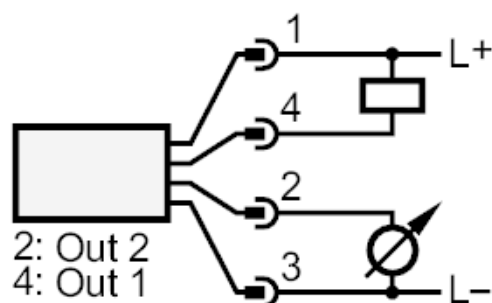
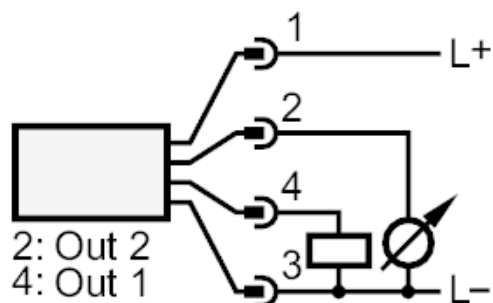
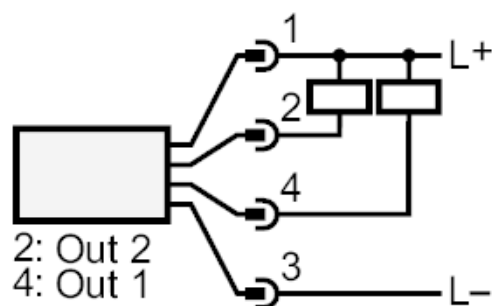
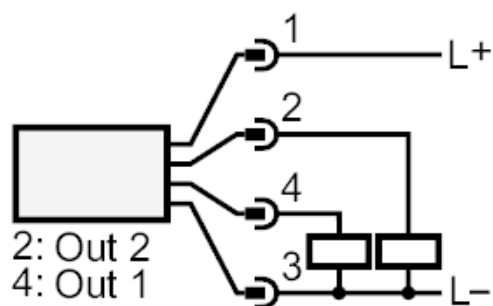
Response times		
Response time	[ms]	< 3
Damping for the switching output dAP	[s]	0...4
Damping for the analogue output dAA in steps	[s]	0 - 0,1 - 0,5 - 2
Max. response time analogue output	[ms]	3
Software / programming		
Parameter setting options	hysteresis / window; normally open / normally closed; 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]	181
Mechanical data		
Weight	[g]	317.8
Materials	stainless steel (1.4404 / 316L); PBT; PC; PEI; EPDM/X; FKM	
Materials (wetted parts)	ceramics (99.9 % Al2O3); PTFE; stainless steel (1.4435 / 316L); surface characteristics: Ra < 0,4 / Rz 4	
Min. pressure cycles	100 million	
Process connection	threaded connection Aseptoflex external thread Aseptoflex	
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		
Remarks	The 3-A qualification is only valid if adapters with 3-A qualification are used for installation.	
Pack quantity	1 pcs.	
Electrical connection		
Connector: 1 x M12; Contacts: gold-plated		

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Connection



OUT1	switching output
OUT2	switching output
	analogue output