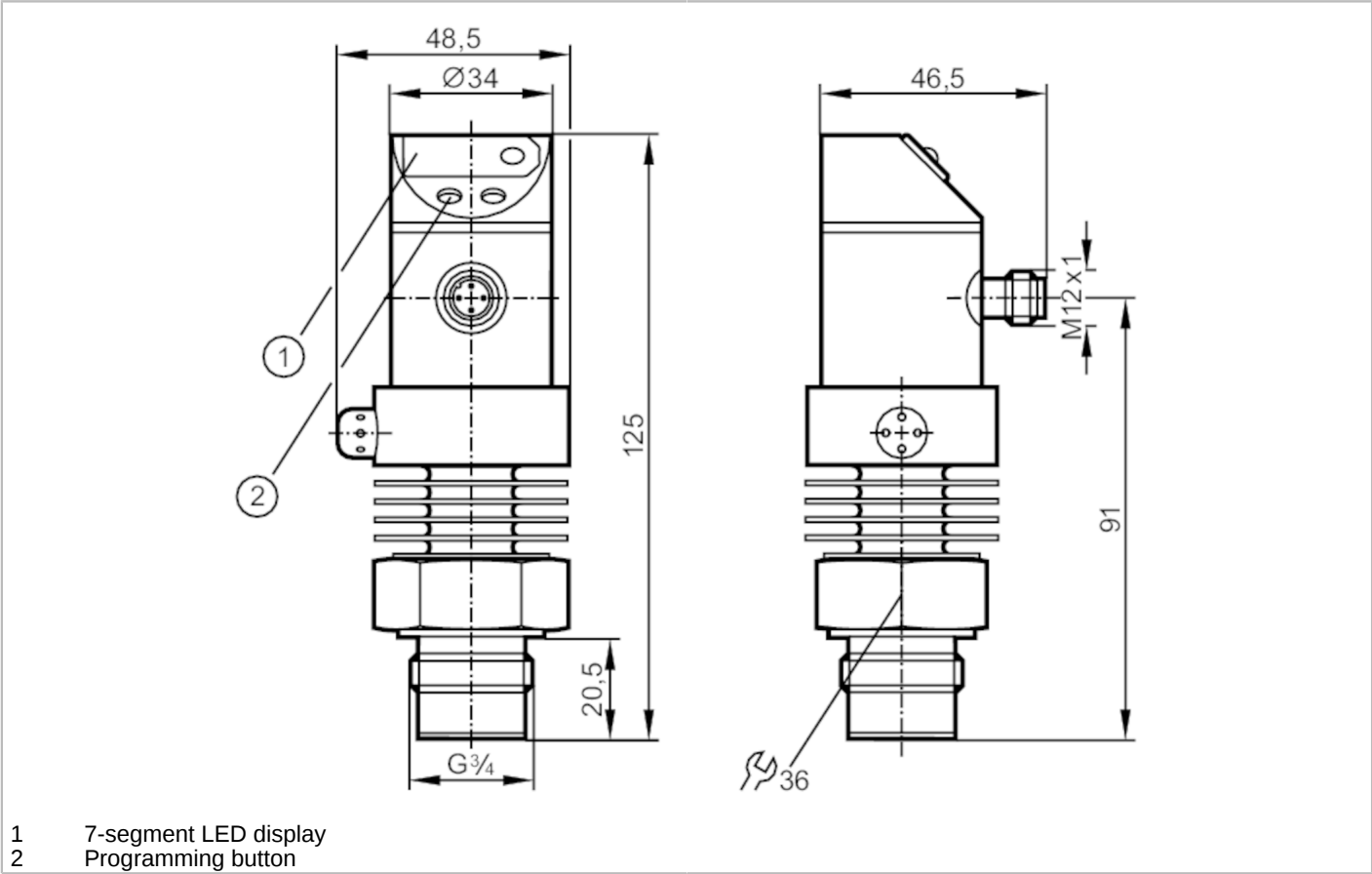




Flush pressure sensor with display

PI-1-3-REB34-MFRKG/US/ IP

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Product characteristics			
Number of inputs and outputs	Number of digital outputs: 2; Number of analog outputs: 1		
Measuring range	-1...3 bar	-15...44 psi	-99...300 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	viscous media and liquids with suspended particles; liquids and gases		
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		
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
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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	-1...3 bar	-15...44 psi	-99...300 kPa
Set point SP	-0.91...3 bar	-13...44 psi	-91...300 kPa
Reset point rP	-0.99...2.92 bar	-14...43 psi	-99...292 kPa
Analog start point	-0.99...0.6 bar	-14...9 psi	-99...60 kPa
Analog end point	0.01...3 bar	1...44 psi	1...300 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]	< ± 0,1; (0...80 °C)



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Temperature coefficient span [% of the span / 10 K]	< ± 0,2; (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; PEI; EPDM/X; FKM	
Materials (wetted parts)	stainless steel (1.4404 / 316L); ceramics (99.9 % Al2O3); 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		
		



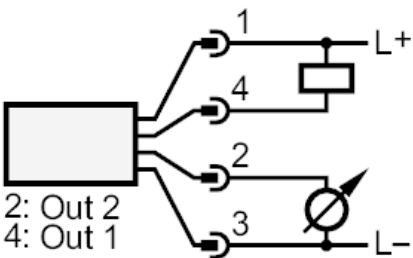
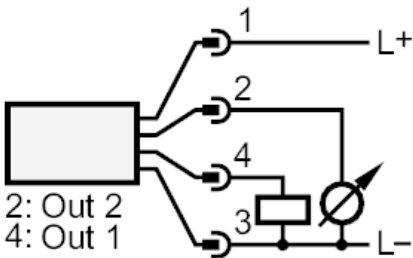
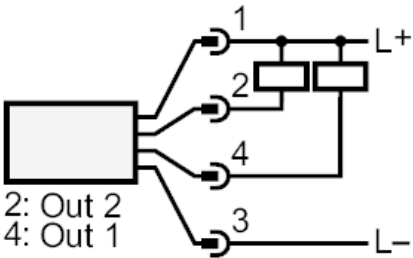
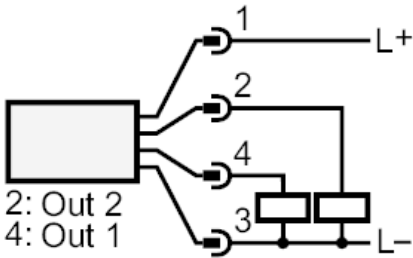
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Connection



OUT1	Switching output
OUT2	Switching output
	analog output