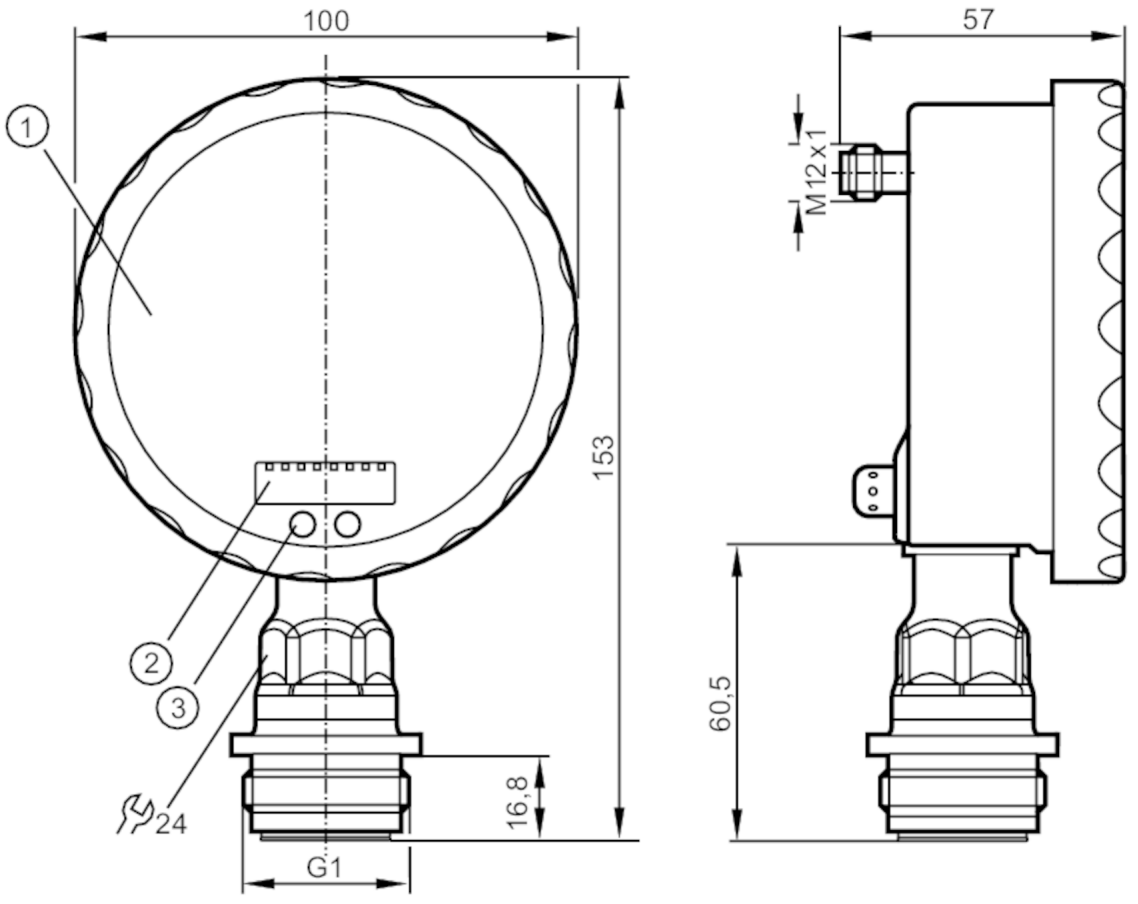
PG2798

Flush pressure sensor with analogue display

PG-,25BREA01-MFRKG/US/ /P



1 analogue display
2 alphanumeric display 4-digit
3 sensor field (programming button)

Product characteristics			
Number of inputs and outputs	Number of digital outputs: 1; Number of analogue outputs: 1		
Measuring range	-0.0124...0.25 bar	-12.4...250 mbar	-5...100.4 inH2O
Process connection	threaded connection G 1 external thread Aseptoflex Vario		
Application			
Special feature	Gold-plated contacts		
Application	flush mountable for the food and beverage industry		
Media	viscous media and liquids with suspended particles; liquids and gases		
Medium temperature [°C]	-25...125; (145 max. 1h)		
Min. bursting pressure	30000 mbar	12043 inH2O	
Pressure rating	6000 mbar	2400 inH2O	
Type of pressure	relative pressure		
No dead space	yes		
MAWP (for applications according to CRN) [bar]	10		

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Electrical data				
Operating voltage	[V]	18...32 DC		
Current consumption	[mA]	< 70; (24 V)		
Min. insulation resistance	[MΩ]	100; (500 V DC)		
Protection class		III		
Reverse polarity protection		yes		
Power-on delay time	[s]	6		
Measuring principle		hydrostatic		
Integrated watchdog		yes		
Inputs / outputs				
Number of inputs and outputs		Number of digital outputs: 1; 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		1		
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]	50		
Number of analogue outputs		1		
Analogue current output	[mA]	4...20, invertible; (scalable)		
Max. load	[Ω]	(Ub - 10 V) / 20 mA		
Short-circuit protection		yes		
Type of short-circuit protection		pulsed		
Overload protection		yes		
Measuring/setting range				
Measuring range		-0.0124...0.25 bar	-12.4...250 mbar	-5...100.4 inH2O
Set point SP		-12...400 mbar	-4.8...160.6 inH2O	
Reset point rP		-12.4...399.6 mbar	-5...160.4 inH2O	
Analogue start point		-12.4...337.6 mbar	-5...135.5 inH2O	
Analogue end point		50...400 mbar	20.1...160.6 inH2O	
In steps of		0.2 mbar	0.1 inH2O	
Accuracy / deviations				
Switch point accuracy	[% of the span]	< ± 0,2; (Turn down 1:1)		
Repeatability	[% of the span]	< ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1)		
Characteristics deviation	[% of the span]	< ± 0,2; (Turn down 1:1 , linearity, incl. hysteresis and repeatability , limit value setting to DIN EN IEC 62828-1)		
Linearity deviation	[% of the span]	< ± 0,15; (Turn down 1:1)		
Hysteresis deviation		< ± 0,15; (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]		< ± 0,05; (0...70 °C)	
Temperature coefficient span [% of the span / 10 K]		< ± 0,15; (0...70 °C)	
Response times			
Response time	[ms]	< 10	
Damping process value dAP	[s]	0.01...30	
Damping for the analogue output dAA	[s]	0.01...30	
Step response time analogue output	[ms]	25	
Operating conditions			
Ambient temperature	[°C]	-25...80	
Storage temperature	[°C]	-40...100	
Protection		IP 67; IP 69K	
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 61000-4-5 Surge	0,5/1 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]	100	
Note on approval		factory certificate available as download at www.factory-certificate.ifm	
UL approval		File number UL	E174189
Mechanical data			
Weight	[g]	520.75	
Materials		stainless steel (1.4404 / 316L); PA; FKM; PTFE; viewing glass: laminated safety glass 4 mm	
Materials (wetted parts)		ceramics (99.9 % Al2O3); stainless steel (1.4435 / 316L); surface characteristics: Ra < 0,4 / Rz 4; PTFE	
Min. pressure cycles		100 million	
Process connection		threaded connection G 1 external thread Aseptoflex Vario	

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Displays / operating elements

Display	Display unit	2 x LED, green
	switching status	LED, yellow
	switch points	LED ring, red
	function display	alphanumeric display, red 4-digit
	measured values	analogue display, 0...350° rotatable, pointer not visible when unit disconnected
	measured values	alphanumeric display, red 4-digit
With scale	yes	
Extended display range (max.)	400 mbar	160.6 inH2O

Remarks

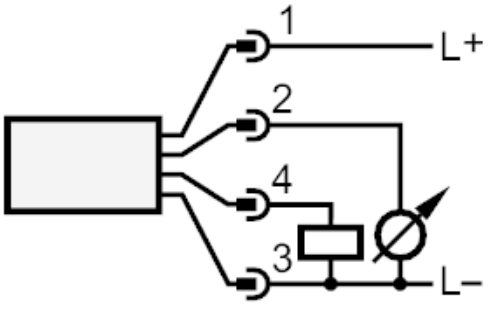
Remarks	characteristics deviation in the extended display range: 1.5 % of the span
	switch point accuracy in the extended display range: 1.5 % of the span
Pack quantity	1 pcs.

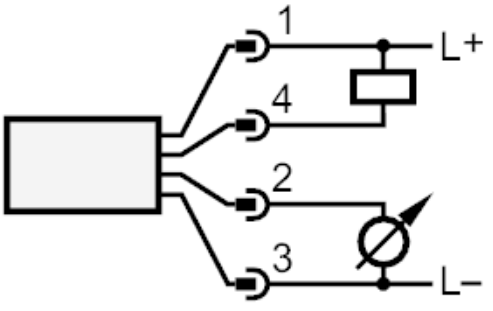
Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection





OUT1	switching output
OUT2	analogue output