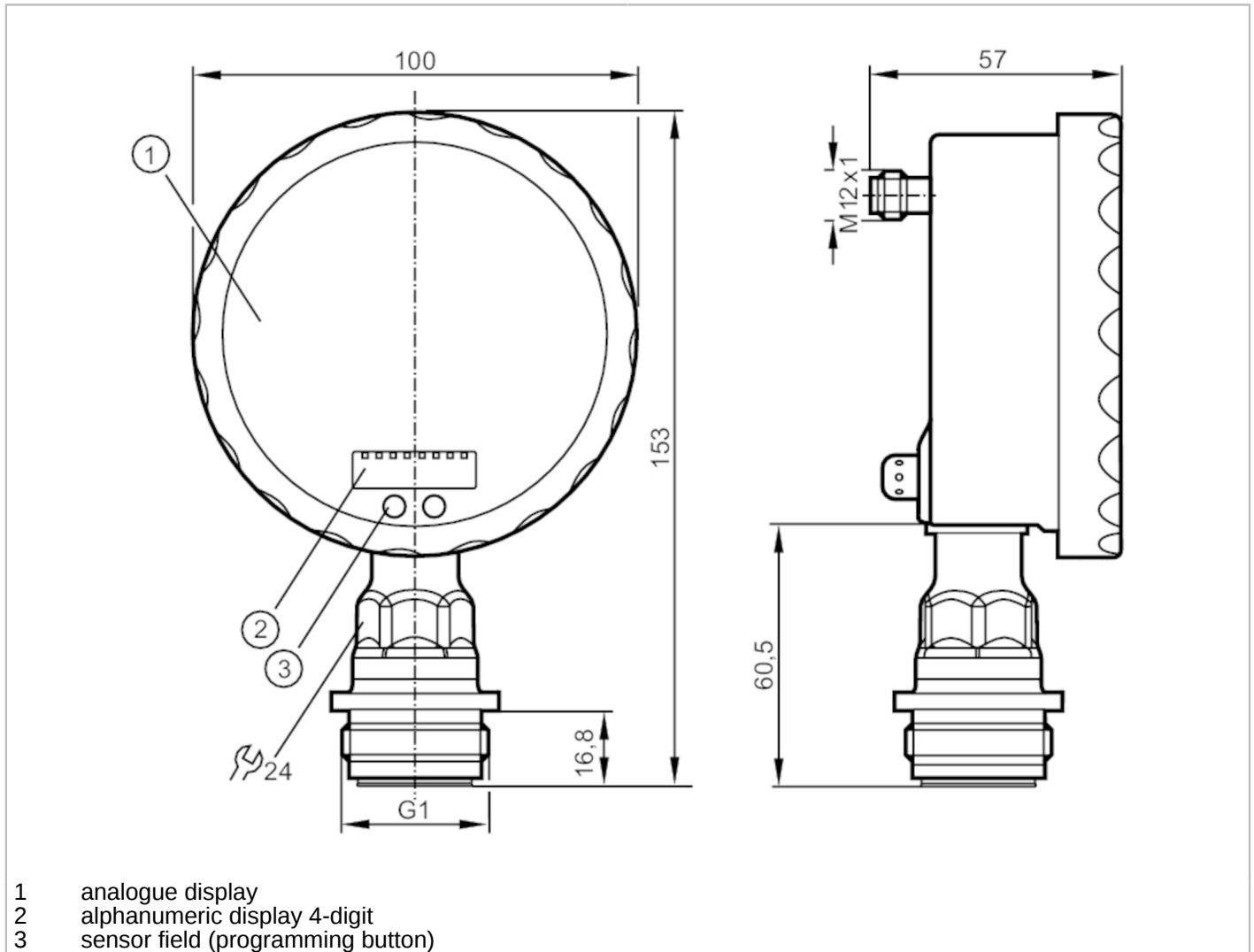


PG2798



Flush pressure sensor with analogue display

PG-,25BREA01-MFRKG/US/ IP



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



Product characteristics

Output signal	switching signal; analogue signal; (configurable)		
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	food and beverage industry; Safety manometer (S) based on DIN EN 837-1		
Media	viscous media and liquids with suspended particles; liquids and gases		
Medium temperature [°C]	-25...125; (145 max. 1h)		
Pressure rating	6000 mbar	2400 inH2O	
Min. bursting pressure	30000 mbar	12043 inH2O	
Type of pressure	relative pressure		
No dead space	yes		
MAWP (for applications according to CRN) [bar]	10		



Flush pressure sensor with analogue display

PG-,25BREA01-MFRKG/US/ IP

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
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] (U _b - 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 16086)
Linearity deviation [% of the span]	< ± 0,15; (Turn down 1:1)
Hysteresis deviation [% of the span]	< ± 0,15; (Turn down 1:1)
Long-term stability	< ± 0,1; (Turn down 1:1; per year)

PG2798



Flush pressure sensor with analogue display

PG-,25BREA01-MFRKG/US/ IP

	[% of the span]	
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 for the switching output 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

Mechanical data

Weight	[g]	551.5
Materials		stainless steel (1.4404 / 316L); PA; FKM; PTFE; viewing glass: laminated safety glass 4 mm
Materials (wetted parts)		ceramics (99.9 % Al ₂ O ₃); PTFE; stainless steel (1.4435 / 316L); surface characteristics: Ra < 0,4 / Rz 4
Min. pressure cycles		100 million
Process connection		threaded connection G 1 external thread Aseptoflex Vario

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 inH ₂ O

PG2798



Flush pressure sensor with analogue display

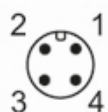
PG-,25BREA01-MFRKG/US/ IP

Remarks

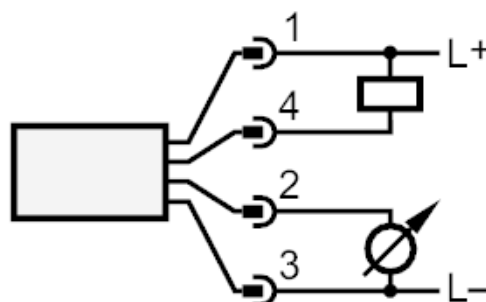
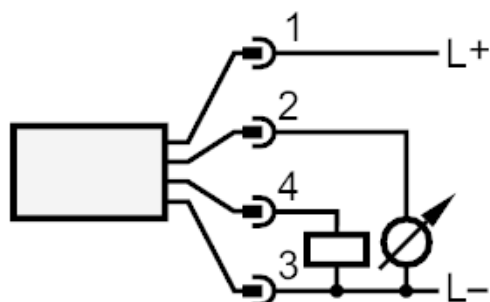
Remarks	characteristics deviation in the extended display range: 1.5 % of the span switch point accuracy in the extended display range: 1.5 % of the span
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; Contacts: gold-plated



Connection



OUT1	switching output
OUT2	analogue output