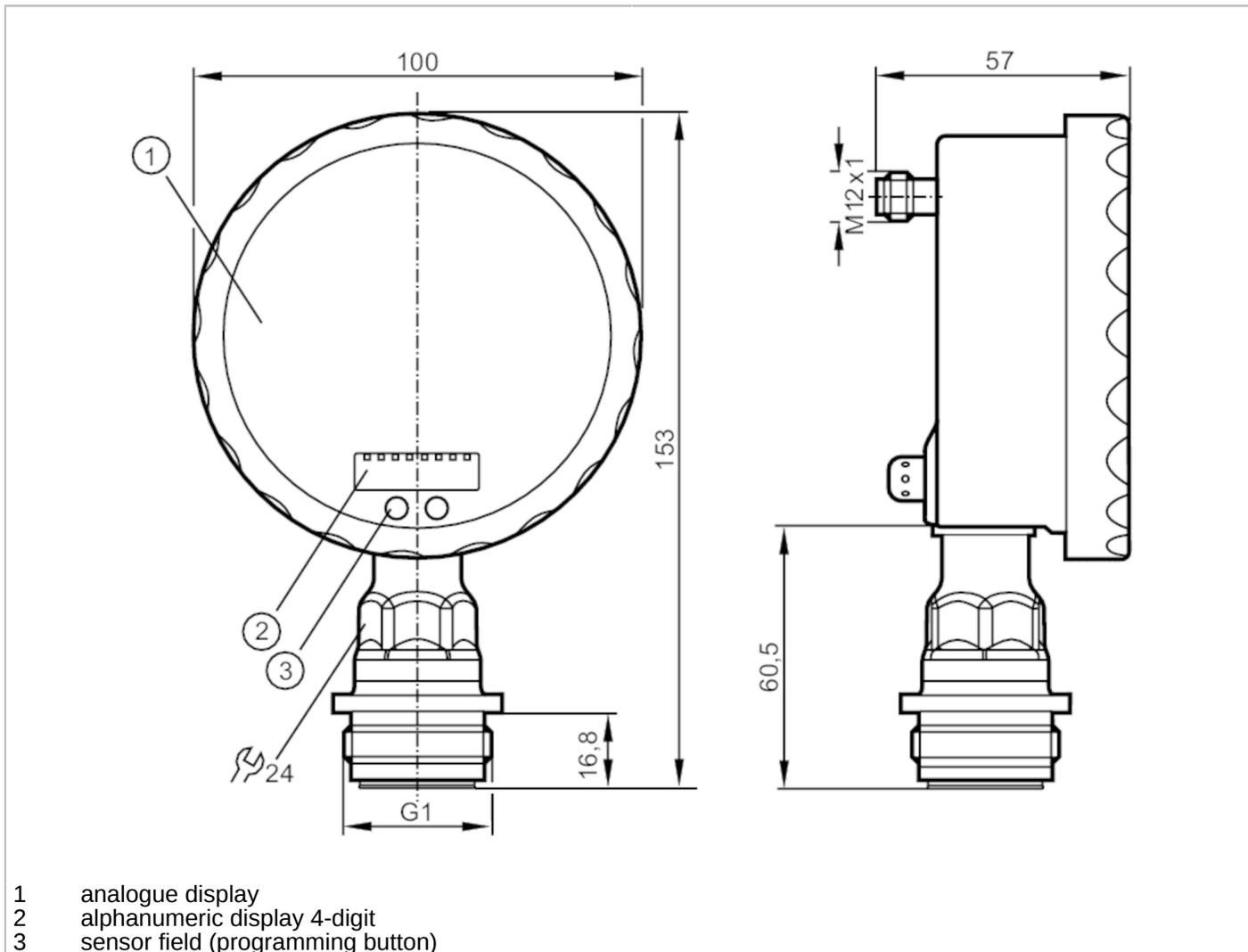


# PG2798



## Flush pressure sensor with analogue display

PG-,25BREA01-MFRKG/US/ IP



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



Application	
Application	hygienic systems; 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
Min. bursting pressure	30000 mbar
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
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 <sub>b</sub> - 10 V) / 20 mA
Short-circuit protection	yes
Type of short-circuit protection	pulsed
Overload protection	yes

Measuring/setting range		
Measuring range	-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)



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	[% 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

### 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 <sub>2</sub> O <sub>3</sub> ); 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
	function display	alphanumeric display, 4-digit
	measured values	analogue display, 0...350° rotatable, pointer not visible when unit disconnected
	measured values	alphanumeric display, 4-digit
With scale		yes
Extended display range (max.)	400 mbar	160.6 inH <sub>2</sub> O

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### Remarks

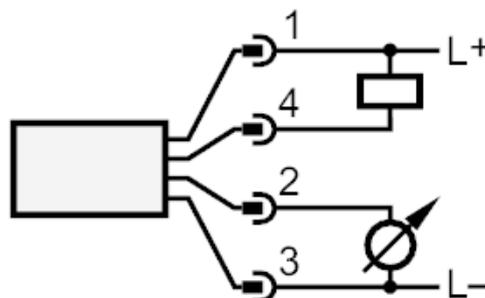
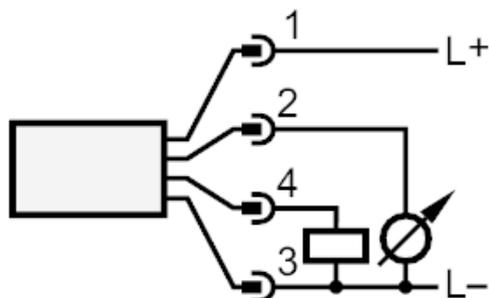
Remarks	characteristics deviation in the extended display range: 1.5 % of the span switch point accuracy in the extended display range: 1.5 % of the span
Pack quantity	1 pcs.

### Electrical connection

Connector: 1 x M12; Contacts: gold-plated



### Connection



OUT1	switching output
OUT2	analogue output