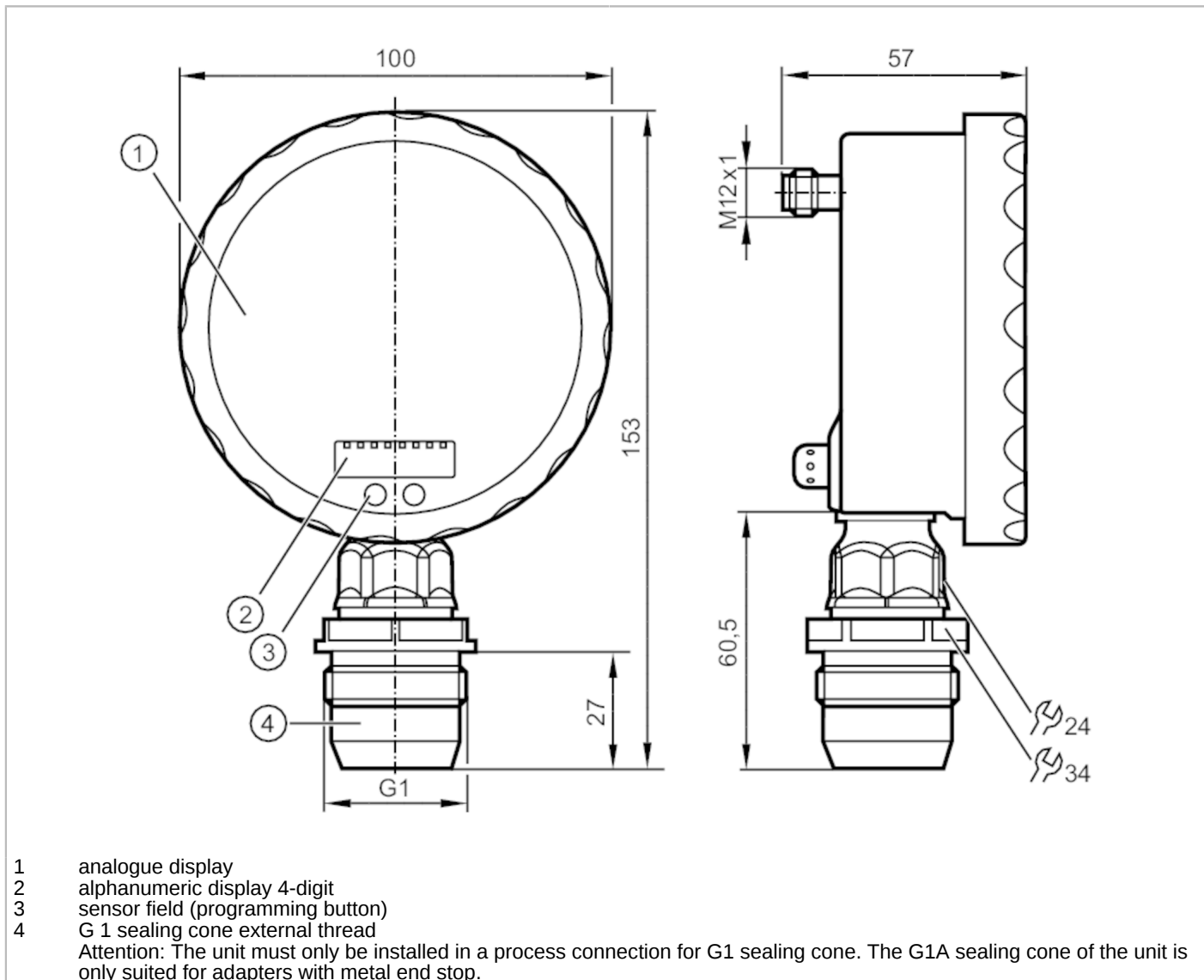


# PG2898



## Flush pressure sensor with analogue display

PG-,25BREA01-MFRKG/US/ IP



- 1 analogue display
  - 2 alphanumeric display 4-digit
  - 3 sensor field (programming button)
  - 4 G 1 sealing cone external thread
- Attention: The unit must only be installed in a process connection for G1 sealing cone. The G1A sealing cone of the unit is only suited for adapters with metal end stop.

ACS CE CRN c UL LISTED US EC 1935/2004 EHEDG Tested FCM FDA S UK CA

### 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 sealing cone Attention: The unit must only be installed in a process connection for G1 sealing cone.; The G1A sealing cone of the unit is only suited for adapters with metal end stop.		

### 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	
Min. bursting pressure [MPa]	3		
Pressure rating	6000 mbar	2400 inH2O	
Pressure rating [MPa]	1		



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Type of pressure		relative pressure
MAWP (for applications according to CRN)	[bar]	10

### 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
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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		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	-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		< ± 0,5; (Turn down 1:1)
	[% of the span]	
Repeatability		< ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1)
	[% of the span]	
Characteristics deviation		< ± 0,5; (Turn down 1:1, linearity, incl. hysteresis and repeatability, limit value setting to DIN EN IEC 62828-1)
	[% of the span]	
Linearity deviation		< ± 0,15; (Turn down 1:1)



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	[% of the span]	
Hysteresis deviation	[% of the span]	$< \pm 0,15$ ; (Turn down 1:1)
Long-term stability	[% of the span]	$< \pm 0,1$ ; (Turn down 1:1; per year)
Temperature coefficient zero point	[% of the span / 10 K]	$< \pm 0,05$ ; (0...70 °C)
Temperature coefficient span	[% of the span / 10 K]	$< \pm 0,15$ ; (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
Vibration resistance	DIN IEC 68-2-6	20 g (10...2000 Hz)
MTTF	[years]	100
Note on approval		factory certificate available as download at <a href="http://www.factory-certificate.ifm">www.factory-certificate.ifm</a>

Mechanical data		
Weight	[g]	530.8
Dimensions	[mm]	153 x 100 x 57
Materials		stainless steel (316L/1.4404); PA; FKM; PTFE; viewing glass: laminated safety glass 4 mm
Materials (wetted parts)		ceramics (99.9 % Al <sub>2</sub> O <sub>3</sub> ); stainless steel (316L/1.4435); surface characteristics: Ra < 0,4 / Rz 4; PTFE
Min. pressure cycles		100 million
Process connection		threaded connection G 1 external thread sealing cone Attention: The unit must only be installed in a process connection for G1 sealing cone.; The G1A sealing cone of the unit is only suited for adapters with metal end stop.

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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

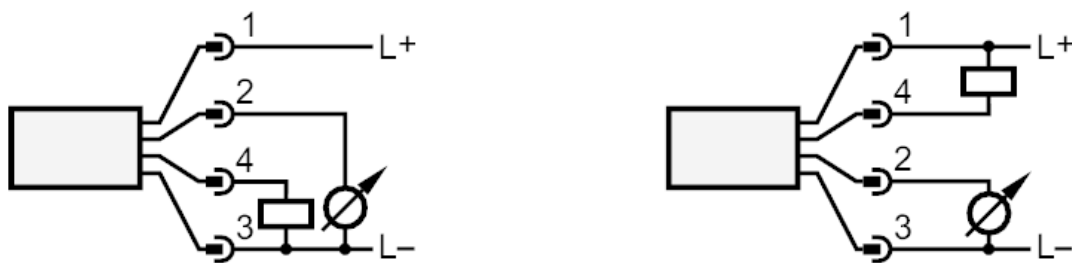
Remarks	
Remarks	characteristics deviation in the extended display range: 1.5 % of the span switch point accuracy in the extended display range: 1.5 % of the span
Pack quantity	1 pcs.

### Electrical connection

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



### Connection



OUT1 switching output  
OUT2 analogue output