

PG2798



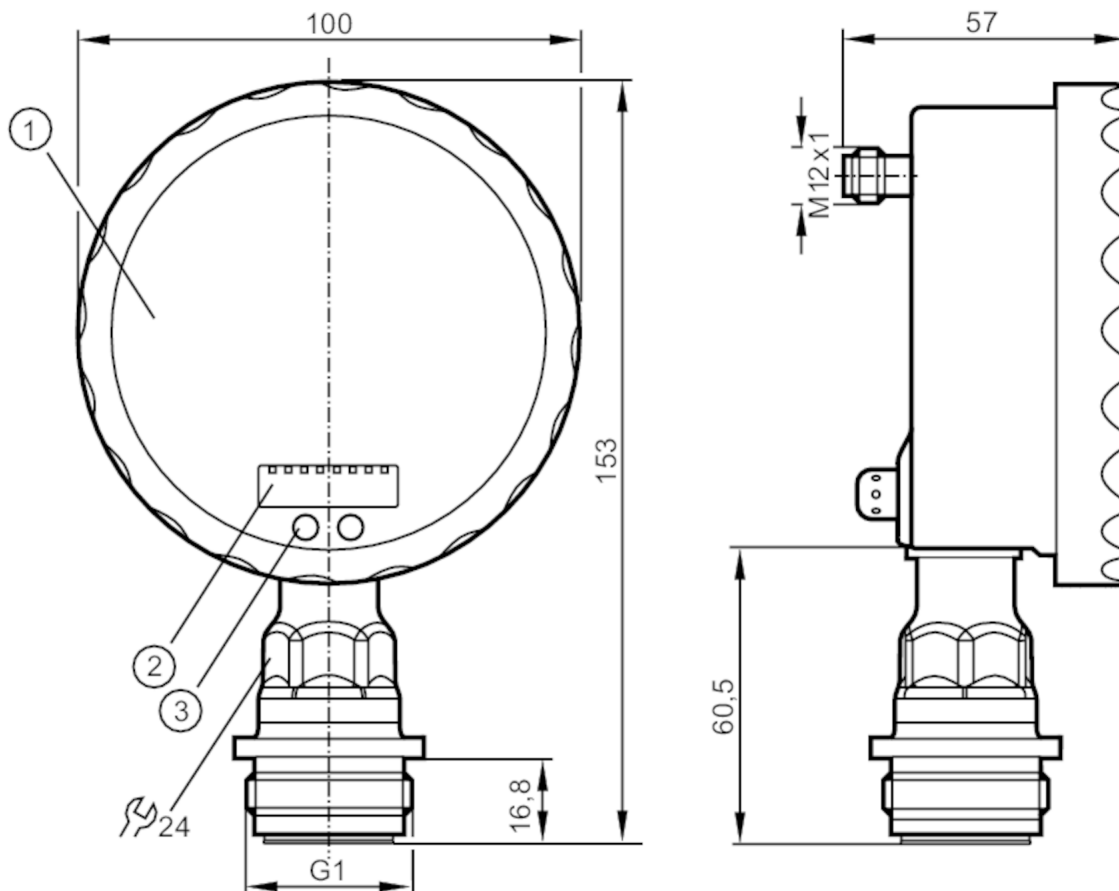
Flush pressure sensor with analogue display

PG-,25BREA01-MFRKG/US/ IP

phase-out article

Alternative articles: PG1708

When selecting an alternative article and accessories please note that technical data may differ!



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



ACS



CRN



US

EC 1935/2004

EHEDG Certified

FCM



Reg31



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 with Aseptoflex Vario sealing contour		
Note	G1 Gewinde nach ISO 228. Alternativ dichtend über rückwärtige Dichtkontur mit Dichtung in Anlehnung an DIN EN ISO 1179-2.		

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. burst pressure	30000 mbar	12043 inH2O	3 MPa



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Pressure rating	6000 mbar	2400 inH2O	1 MPa
Type of pressure	relative pressure		
No dead space	yes		
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		
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 _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]	< ± 0,5; (Turn down 1:1)		
Repeatability [% of the span]	< ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1)		
Characteristics deviation [% of the span]	< ± 0,5; (Turn down 1:1, linearity, incl. hysteresis and repeatability, limit value setting to DIN EN IEC 62828-1)		



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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 [% 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 EN 60068-2-27
Vibration resistance	DIN EN 60068-2-6	10 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
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)	stainless steel (316L/1.4435) surface characteristics: Ra < 0,4 µm / Rz = 4 µm; ceramics (99.9 % Al2O3); PTFE
Min. pressure cycles	100 million
Process connection	threaded connection G 1 external thread with Aseptoflex Vario sealing contour

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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

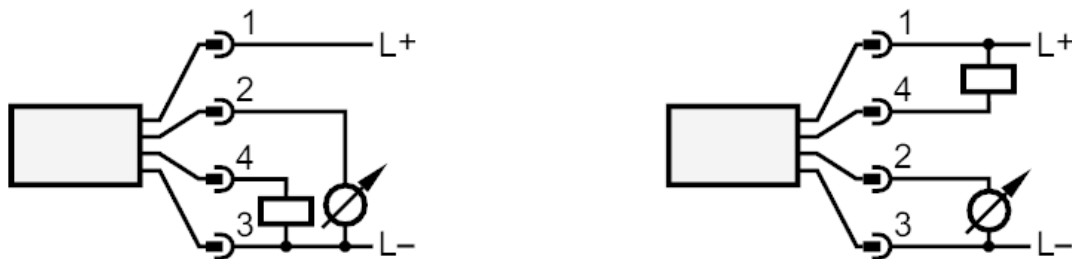
Remarks	
Remarks	characteristics deviation in the extended display range: 1.5 % of the span switch point accuracy in the extended display range: 1.5 % of the span
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Contacts: 4, gold-plated



Connection



OUT1 switching output
OUT2 analogue output