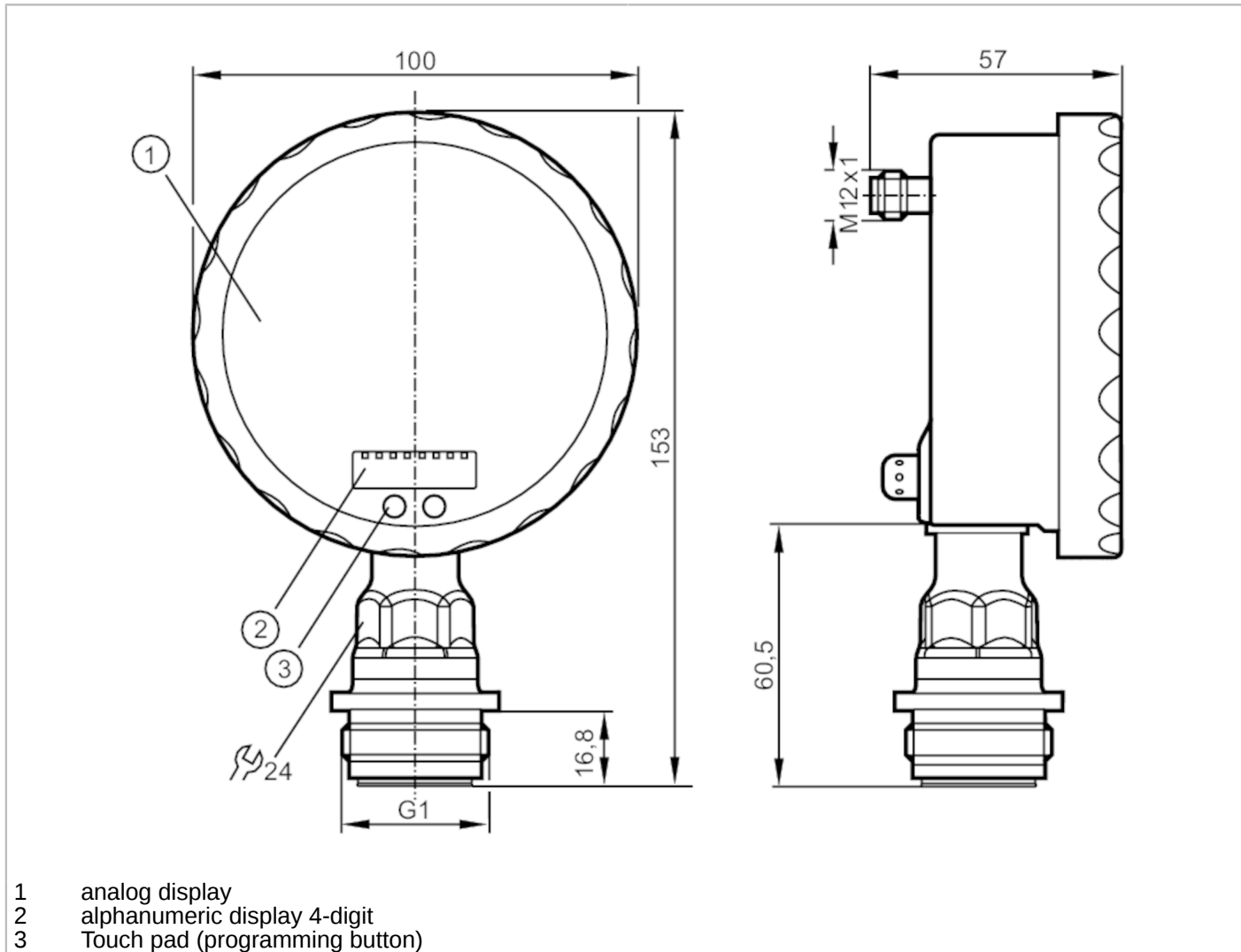


# PG2796



## Flush pressure sensor with analog display

PG-2,5-REA01-MFRKG/US/ IP



- 1 analog display
- 2 alphanumeric display 4-digit
- 3 Touch pad (programming button)



### Product characteristics

Number of inputs and outputs	Number of digital outputs: 1; Number of analog outputs: 1		
Measuring range	-0.124...2.5 bar	-124...2500 mbar	-1.8...36.27 psi
Process connection	threaded connection G 1 external thread Aseptoflex Vario		

### Application

System	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	50 bar	725 psi	
Pressure rating	20 bar	290 psi	
Type of pressure	relative pressure		
No dead space	yes		
MAWP (for applications according to CRN) [bar]	20		



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PG-2,5-REA01-MFRKG/US/ /P

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 analog outputs: 1	
Outputs			
Total number of outputs		2	
Output signal		switching signal; analog signal; (configurable)	
Electrical design		PNP/NPN	
Number of digital outputs		1	
Output function		normally open / closed; (configurable)	
Max. voltage drop switching output DC	[V]	2	
Permanent current rating of switching output DC	[mA]	250	
Switching frequency DC	[Hz]	50	
Number of analog outputs		1	
Analog 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		yes (non-latching)	
Overload protection		yes	
Measuring/setting range			
Measuring range		-0.124...2.5 bar	-124...2500 mbar      -1.8...36.27 psi
Set point SP		-0.12...4 bar	-1.74...58.02 psi
Reset point rP		-0.124...3.996 bar	-1.8...57.96 psi
Analog start point		-0.124...3.37 bar	-1.8...48.87 psi
Analog end point		0.5...4 bar	7.26...58.02 psi
In steps of		0.002 bar	0.03 psi
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)

### Reaction times

Response time	[ms]	< 10
Damping process value dAP	[s]	0.01...30
Damping for the analog output dAA	[s]	0.01...30
Step response time analog 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 <a href="http://www.factory-certificate.ifm">www.factory-certificate.ifm</a>

### Mechanical data

Weight	[g]	521.3
Material		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> ); 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

### 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	analog display, 0...350° rotatable, pointer not visible when unit disconnected
	Measured values	alphanumeric display, red 4-digit
With scale		yes
Extended display range (max.)	4 bar	58.02 psi

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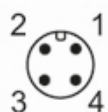
PG-2,5-REA01-MFRKG/US/ /P

### Remarks

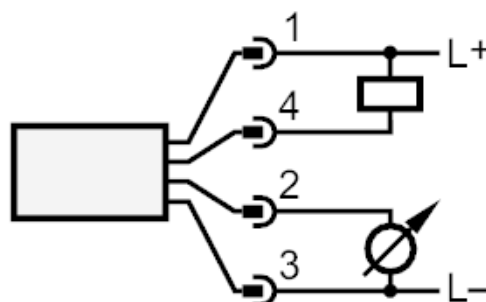
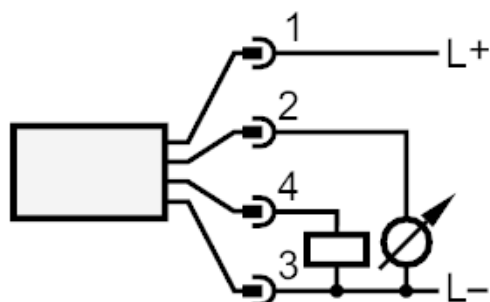
Remarks	characteristics deviation in the extended display range:1.5 % of the span switch point accuracy in the extended display range: 1.5 % of the span
Pack quantity	1 pcs.

### Electrical connection

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



### Connection



OUT1	Switching output
OUT2	analog output