

PG2794



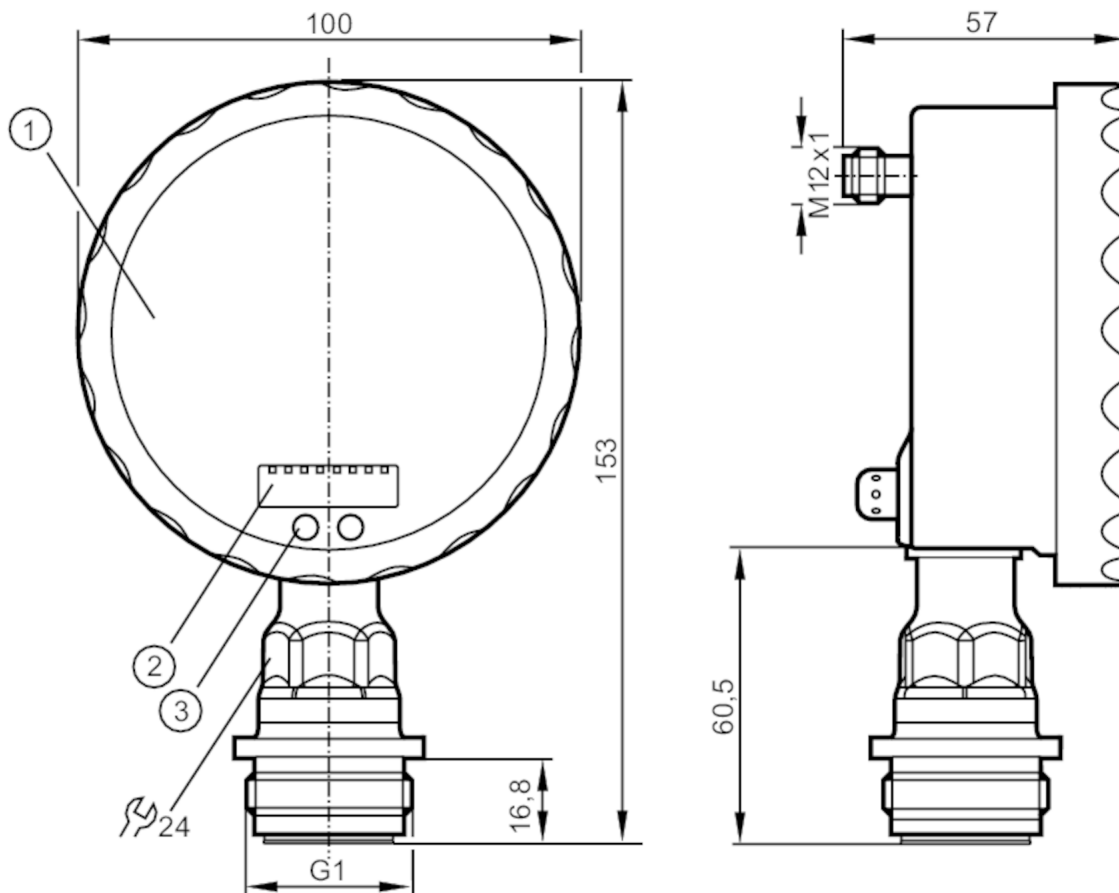
Flush pressure sensor with analog display

PG-010-REA01-MFRKG/US/ /P

Article to be discontinued

Alternative articles: PG1704

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



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



ACS



CRN



EC 1935/2004

EHEDG Certified

FCM



Reg31



Product characteristics

Number of inputs and outputs	Number of digital outputs: 1; Number of analog outputs: 1	
Measuring range	-1...10 bar	-14.5...145 psi
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	150 bar	2175 psi 15 MPa

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Pressure rating	50 bar	725 psi	5 MPa
Type of pressure	relative pressure; vacuum		
No dead space	yes		
MAWP (for applications according to CRN) [bar]	50		

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 analog outputs: 1		
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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 _b - 10 V) / 20 mA		
Short-circuit protection	yes		
Type of short-circuit protection	yes (non-latching)		
Overload protection	yes		

Measuring/setting range

Measuring range	-1...10 bar	-14.5...145 psi
Set point SP	-0.98...16 bar	-14.2...232 psi
Reset point rP	-1...15.98 bar	-14.5...231.8 psi
Analog start point	-1...13.5 bar	-14.5...195.7 psi
Analog end point [bar]	1.5...16	
In steps of	0.01 bar	0.1 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)	



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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)

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 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	

Mechanical data	
Weight [g]	520.1
Dimensions [mm]	153 x 100 x 57
Material	stainless steel (1.4404 / 316L); PA; FKM; PTFE; viewing glass: laminated safety glass 4 mm
Materials (wetted parts)	stainless steel (1.4435 / 316L) 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	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.)	16 bar	232 psi

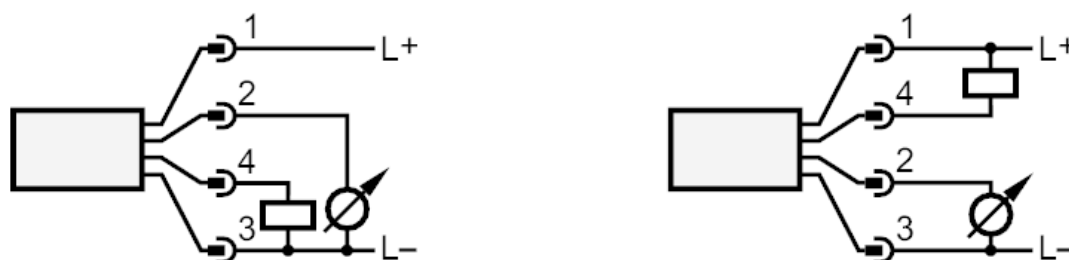
Remarks	
Remarks	characteristics deviation in the extended display range: 1.5 % of the span switch point accuracy in the extended display range: 1.5 % of the span
Pack quantity	1 pcs.

Electrical connection

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



Connection



OUT1 Switching output
OUT2 analog output