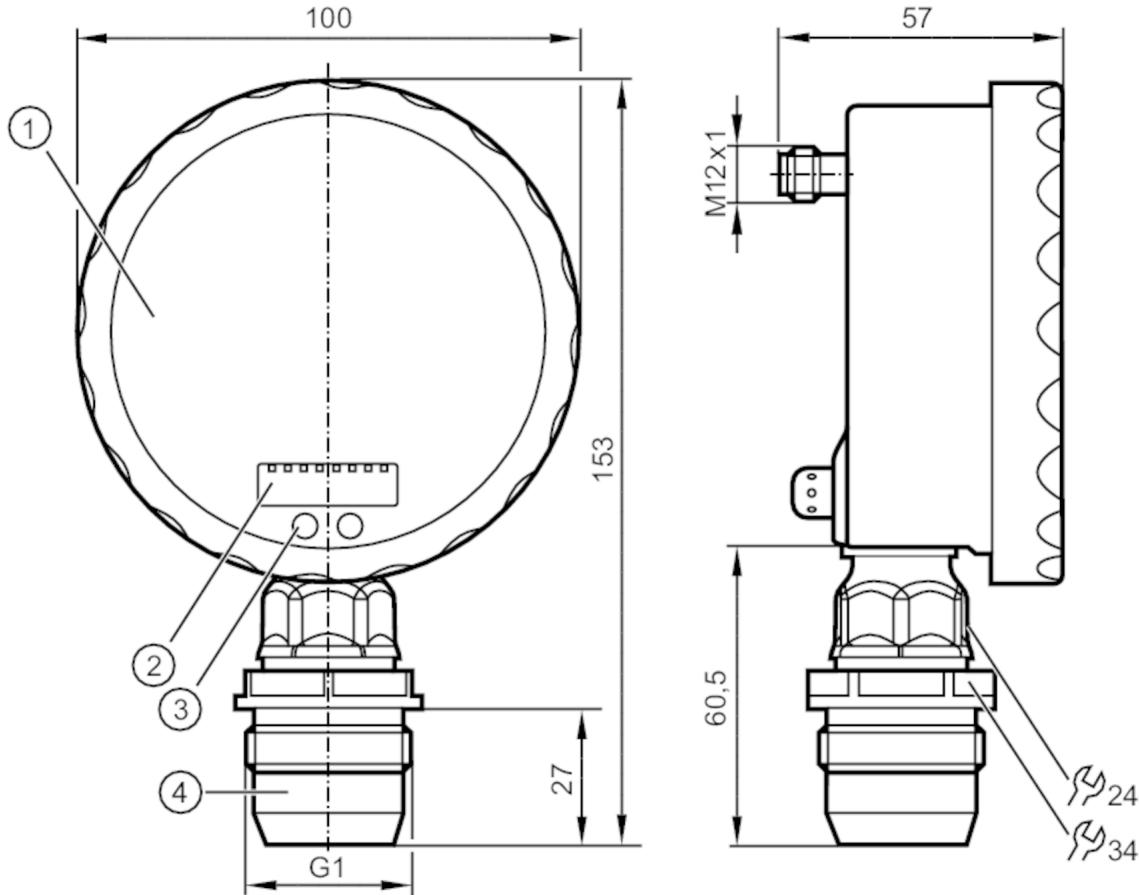


Flush pressure sensor with analogue display

PG-010-REA01-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 CRN EC 1935/2004 EHEDG Tested FCM S

Product characteristics

Number of inputs and outputs	Number of digital outputs: 1; Number of analogue outputs: 1	
Measuring range	-1...10 bar	-14.5...145 psi
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	150 bar	2175 psi
Pressure rating	50 bar	725 psi
Type of pressure	relative pressure; vacuum	

PG2894



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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 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]	(Ub - 10 V) / 20 mA
Short-circuit protection		yes
Type of short-circuit protection		pulsed
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
Analogue start point	-1...13.5 bar	-14.5...195.7 psi
Analogue 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)
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		< ± 0,1; (Turn down 1:1; per year)
	[% of the span]	
Temperature coefficient zero point		< ± 0,05; (0...70 °C)
	[% of the span / 10 K]	
Temperature coefficient span		< ± 0,15; (0...70 °C)
	[% of the span / 10 K]	
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 EN 61000-4-3 HF radiated EN 61000-4-4 Burst EN 61000-4-5 Surge EN 61000-4-6 HF conducted
		4 kV CD / 8 kV AD 10 V/m 2 kV 0,5/1 kV 10 V
Shock resistance		DIN IEC 68-2-27
Vibration resistance		DIN IEC 68-2-6
MTTF	[years]	100
Note on approval		factory certificate available as download at www.factory-certificate.ifm
Mechanical data		
Weight	[g]	532.4
Materials		stainless steel (316L/1.4404); PA; FKM; PTFE; viewing glass: laminated safety glass 4 mm
Materials (wetted parts)		ceramics (99.9 % Al2O3); 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.
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

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Extended display range
(max.)

16 bar

232 psi

Remarks

Remarks

characteristics deviation in the extended display range: 1.5 % of the span

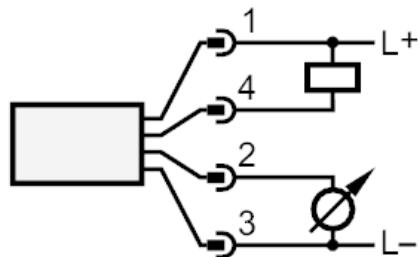
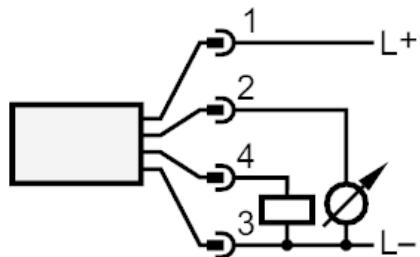
switch point accuracy in the extended display range: 1.5 % of the span

Pack quantity

1 pcs.

Electrical connection

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

**Connection**OUT1
OUT2switching output
analogue output