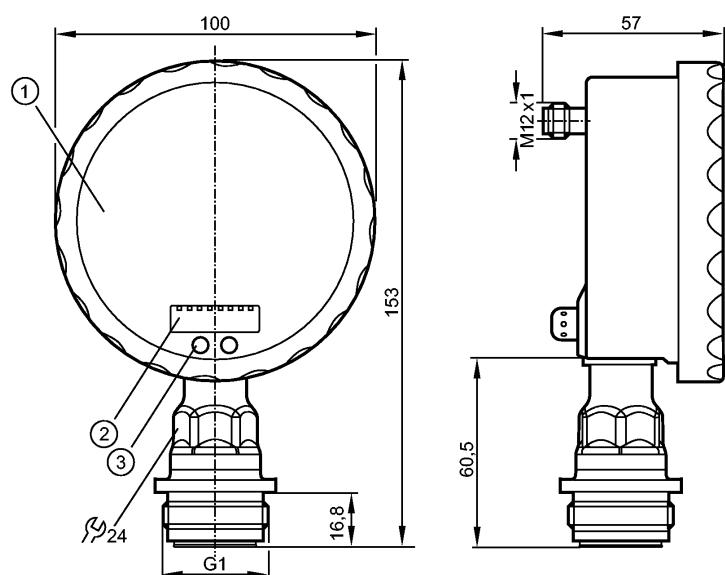




PG-025-REA01-MFRKG/US/ /P

Pressure sensors



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

A3 ACS CE EC 1935/2004 EHEDG Certified

FDA Reg31

Product characteristics

Electronic pressure sensor
with analog display

Quick disconnect

Suitable for all standard CIP and SIP processes

Analog display 0...350° rotatable

Resolution 0.25%

Pointer not visible when unit disconnected

no dead space

Process connection: G 1 A / Aseptoflex Vario

2 Output

OUT1 = Switching output

OUT2 = Analog output

analog display, 4-digit alphanumeric display

Measuring range: -1.00...25.00 bar / -14.4...362.7 psi

Application

Application

Type of pressure: relative pressure
Hygienic systems, viscous media and liquids with suspended particles
Liquids and gases

Pressure rating	100 bar	1450 psi
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Bursting pressure min.	350 bar	5070 psi
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Medium temperature	[°C]	-25...125 (145 max. 1h)
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Electrical data

Electrical design	DC PNP/NPN
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Operating voltage	[V]	18...32 DC
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Current consumption	[mA]	< 70 (24 V)
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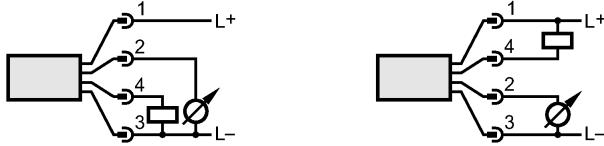
Insulation resistance	[MΩ]	> 100 (500 V DC)
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Protection class	III
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PG2793 - Electronic pressure sensor with analog display - eclass: 27201302 / 27-20-13-02

Reverse polarity protection		yes
Outputs		
Output		2 Output OUT1 = Switching output OUT2 = Analog output
Output function		1 x normally open / closed programmable + 1 x analogue (4...20 / 20...4 mA, scalable)
Current rating [mA]		250
Voltage drop [V]		< 2
Short-circuit protection		yes (non-latching)
Overload protection		yes
Switching frequency [Hz]		50
Analog output		I: 4...20 mA (Ineg: 20...4 mA)
Max. load [Ω]		I / Ineg: max. (Ub - 10 V) x 50
Measuring / setting range		
Measuring range	-1.00...25.00 bar	-14.4...362.7 psi
Setting range		
Set point, SP	-0.96...40.00 bar	-13.8...580.2 psi
Reset point, rP	-1.00...39.96 bar	-14.4...579.6 psi
Analog start point, ASP	-1.00...33.76 bar	-14.4...489.6 psi
Analog end point, AEP	5.24...40.00 bar	75.9...580.2 psi
in steps of	0.02 bar	0.3 psi
Accuracy / deviations		
Accuracy / deviations		
(in % of the span) Turn down 1:1		
Switch point accuracy		< ± 0.2
Characteristics deviation *)		< ± 0.2
Linearity		< ± 0.15
Hysteresis		< ± 0.15
Repeatability **)		< ± 0.1
Long-term stability ***)		< ± 0.1
Temperature coefficients (TEMPCO) in the temperature range 0...70° C (in % of the span per 10 K)		
Greatest TEMPCO of the zero point		< ± 0.05
Greatest TEMPCO of the span		< ± 0.15
Reaction times		
Power-on delay time [s]		6
Min. response time switching output [ms]		10
Damping for the switching output (dAP) [s]		0.01...30
Damping for the analog output (dAA) [s]		0.01...30
Step response time analogue output [ms]		25
Integrated watchdog		yes
Environment		
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:	50 g (11 ms)
Vibration resistance	DIN IEC 68-2-6:	20 g (10...2000 Hz)
MTTF [Years]		100
Mechanical data		

PG2793 - Electronic pressure sensor with analog display - eclass: 27201302 / 27-20-13-02

Process connection	G 1 A / Aseptoflex Vario	
Materials (wetted parts)	ceramics (99.9 % Al ₂ O ₃); PTFE; stainless steel 316L / 1.4435; surface characteristics: Ra < 0.4 / Rz 4	
Housing materials	stainless steel 316L / 1.4404; PA; FPM (Viton); PTFE; viewing glass: laminated safety glass 4 mm	
Switching cycles min.	100 million	
Weight [kg]	0.561	
Displays / operating elements		
Display	Display unit 2 x LED green Switching status LED yellow Switch points LED ring Function display 4-digit alphanumeric display Measured values analog display, 4-digit alphanumeric display	
Extended display range (max.)	40 bar	580.2 psi
Electrical connection		
Connection	M12 connector; gold-plated contacts	
Wiring		
2 1 3 4		
Remarks		
Remarks	*) linearity, incl. hysteresis and repeatability; (limit value setting to DIN 16086) 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 **) with temperature fluctuations < 10 K ***) in % of the span per year	
Pack quantity [piece]	1	

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