

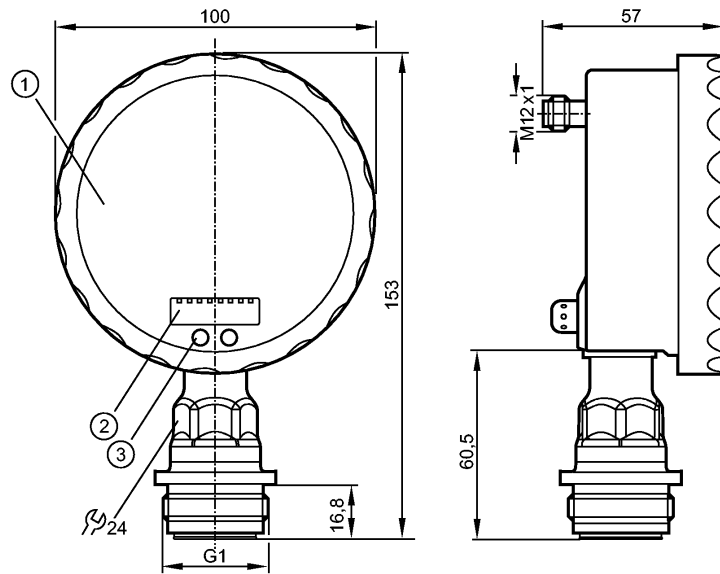


# PG2793

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



Pressure sensors



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



ACS



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

Bursting pressure min.

350 bar

5070 psi

Medium temperature

[°C]

-25...125 (145 max. 1h)

### Electrical data

Electrical design

DC PNP/NPN

Operating voltage

[V]

18...32 DC

Current consumption

[mA]

< 70 (24 V)



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Pressure sensors

Insulation resistance	[MΩ]	> 100 (500 V DC)
Protection class		III
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. (U <sub>b</sub> - 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



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Pressure sensors

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

### Mechanical data

Process connection	G 1 A / Aseptoflex Vario	
Materials (wetted parts)	ceramics (99.9 % Al <sub>2</sub> O <sub>3</sub> ); 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

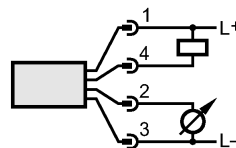
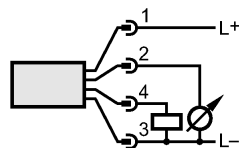
### Displays / operating elements

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
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#### Wiring



### Remarks

Remarks	<p>*) 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 &lt; 10 K          ***) in % of the span per year</p>
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Pack quantity	[piece]	1
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