

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



EHDG Certified FDA Reg31

Product characteristics
Electronic pressure sensor
with analog display

Quick disconnect

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	DC PNP/NPN	
Operating voltage [V]	18...32 DC	
Current consumption [mA]	< 70 (24 V)	
Insulation resistance [MΩ]	> 100 (500 V DC)	
Protection class	III	
Reverse polarity protection	yes	

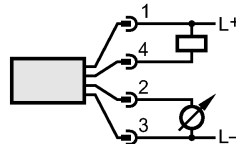
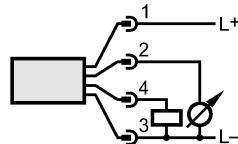
PG2793 - Electronic pressure sensor with analog display - eclass: 27201302 / 27-20-13-02

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 _b - 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:	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	

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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 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	M12 connector; gold-plated contacts	

Wiring



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]

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