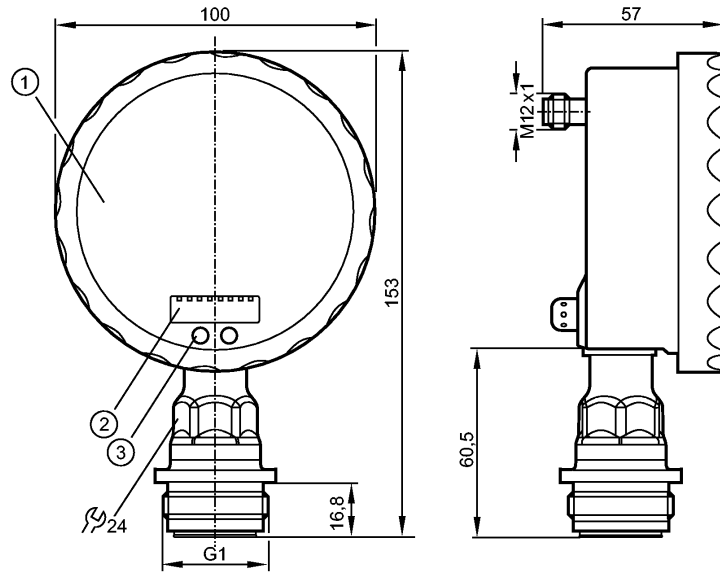


PG2795

PG-004-REA01-MFRKG/US/ /P

Pressure sensors



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



Made in Germany

Product characteristics

Electronic pressure sensor with analogue display	
Connector	
Process connection: G 1 A / Aseptoflex Vario	
Suitable for all standard CIP and SIP processes	
Analogue display 0...350° rotatable	
Resolution 0.25%	
Pointer not visible when unit disconnected	
2 outputs OUT1 = switching output OUT2 = analogue output	
analogue display, 4-digit alphanumeric display	
Measuring range: -1.000...4.000 bar / -14.50...58.00 psi	

Application

Application	Type of pressure: relative pressure Hygienic systems, viscous media and liquids with suspended particles Liquids and gases	
Pressure rating	30 bar	435 psi
Bursting pressure min.	100 bar	1450 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)
Insulation resistance [MΩ]	> 100 (500 V DC)
Protection class	III
Reverse polarity protection	yes

Outputs		
Output	2 outputs OUT1 = switching output OUT2 = analogue 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	pulsed	
Overload protection	yes	
Switching frequency [Hz]	50	
Analogue 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	-1.000...4.000 bar	-14.50...58.00 psi
Setting range		
Set point, SP	-0.990...6.400 bar	-14.35...92.80 psi
Reset point, rP	-1.000...6.390 bar	-14.50...92.65 psi
Analogue start point, ASP	-1.000...5.400 bar	-14.50...78.30 psi
Analogue end point, AEP	0.000...6.400 bar	0.00...92.80 psi
in steps of	0.005 bar	0.05 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 analogue 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	

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Pressure sensors

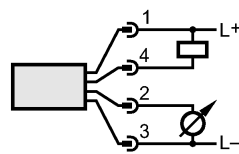
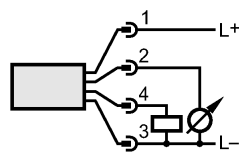
Tests / approvals		
EMC	EN 61000-4-2 ESD:	4 kV CD / 8 kV AD
	EN 61000-4-3 HF radiated:	10 V/m
	EN 61000-4-4 Burst:	2 kV
	EN 61000-4-5 Surge:	0.5/1 kV
	EN 61000-4-6 HF conducted:	10 V
Shock resistance	DIN IEC 68-2-27:	50 g (11 ms)
Vibration resistance	DIN IEC 68-2-6:	20 g (10...2000 Hz)
MTTF	[Years]	100

Mechanical data	
Process connection	G 1 A / Aseptoflex Vario
Materials (wetted parts)	ceramics (99.9 % Al 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] 0.559

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	analogue display, 4-digit alphanumeric display
Extended display range (max.)	6.4 bar	92.8 psi

Electrical connection	
Connection	M12 connector; Gold-plated contacts

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