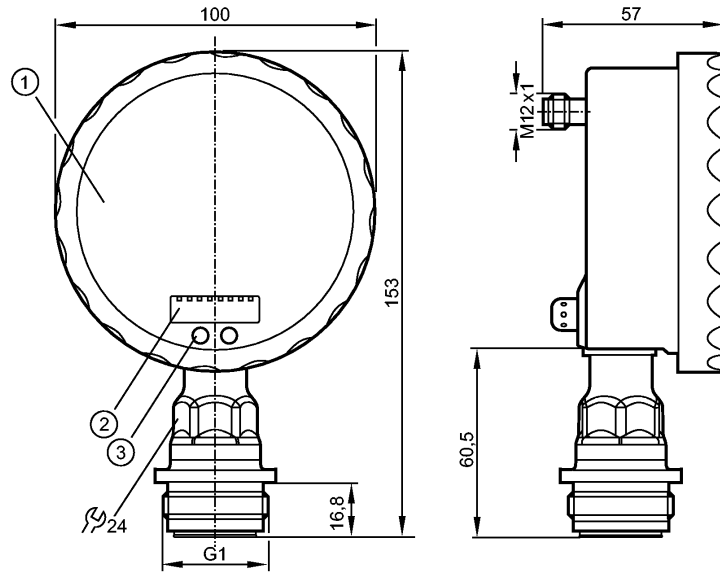


PG2793

PG-025-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: -1.00...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

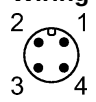
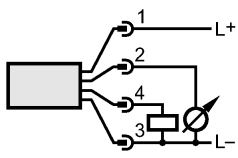
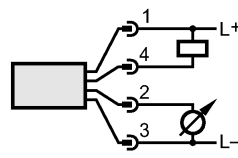
Electrical design	DC PNP/NPN
Operating voltage [V]	18...32 DC
Current consumption [mA]	< 70 (24 V)
Insulation resistance [MΩ]	> 100 (500 V DC)
Protection class	III
Reverse polarity protection	yes

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	-1.00...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
Analogue start point, ASP	-1.00...33.76 bar	-14.4...489.6 psi
Analogue 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 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: 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		
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 Switching status Switch points Function display Measured values	2 x LED green LED yellow LED ring 4-digit alphanumeric display analogue display, 4-digit alphanumeric display
Extended display range (max.)	40 bar	580.2 psi
Electrical connection		
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]	1	