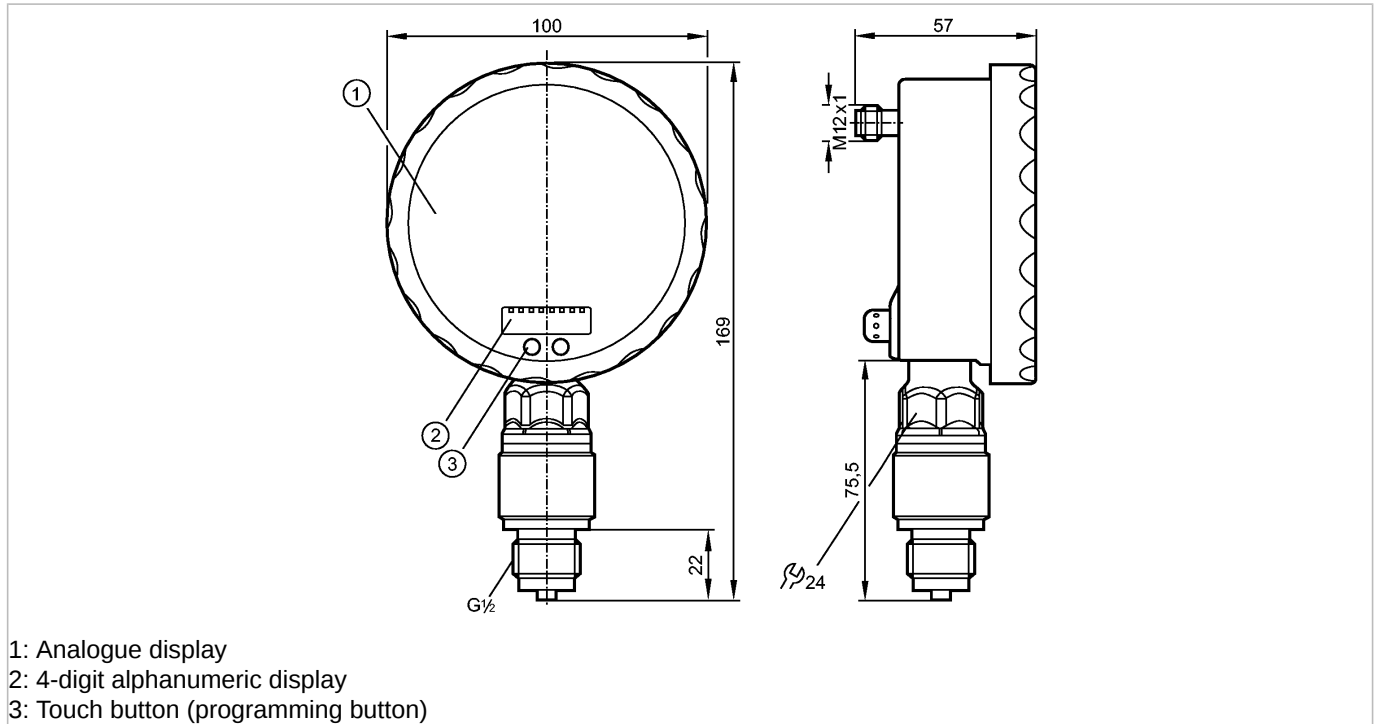


**PG2450**

PG-400-REB12-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 1/2	
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: 0...400 bar / 0...5800 psi	

**Application**

Application	Type of pressure: relative pressure Liquids and gases Use in gases at pressures > 25 bar only after contacting the manufacturer ifm	
Pressure rating	800 bar	11600 psi
Bursting pressure min.	1200 bar	17400 psi
Medium temperature [°C]	-25...80	

**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**

**PG2450**

PG-400-REB12-MFRKG/US/ /P

**Pressure sensors**

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]	75	
Analogue 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	0...400 bar	0...5800 psi
Setting range		
Set point, SP	2...600 bar	30...8700 psi
Reset point, rP	0...598 bar	0...8670 psi
Analogue start point, ASP	0...500 bar	0...7250 psi
Analogue end point, AEP	100...600 bar	1450...8700 psi
in steps of	1 bar	10 psi

**Accuracy / deviations**

Accuracy / deviations (in % of the span) Turn down 1:1		
Switch point accuracy	< ± 0.6	
Characteristics deviation *)	< ± 0.35 (BFSL) / < ± 0.6 (LS)	
Hysteresis	< ± 0.5	
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	< ± 0.3	
Greatest TEMPCO of the span	< ± 0.3	

**Reaction times**

Power-on delay time [s]	6	
Min. response time switching output [ms]	9	
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]	28	
Integrated watchdog	yes	

**Environment**

Ambient temperature [°C]	-20...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

**PG2450**

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**Pressure sensors**

	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 ½	
Materials (wetted parts)	ceramics (Al <sub>2</sub> O <sub>3</sub> ); FPM; stainless steel 316L / 1.4404	
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]	0.615	

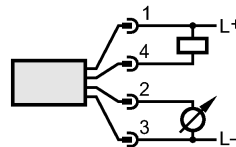
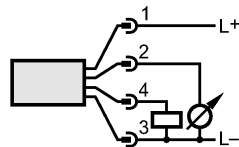
**Displays / operating elements**

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.)	600 bar	8700 psi

**Electrical connection**

Connection	M12 connector; Gold-plated contacts	
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**Wiring**



**Remarks**

Remarks	<p>*) BFSL = Best Fit Straight Line                  switch point accuracy in the extended display range: 1.5 % of the span                  **) with temperature fluctuations &lt; 10 K                  ***) in% of the span / 6 months</p>
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Pack quantity [piece]	1
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