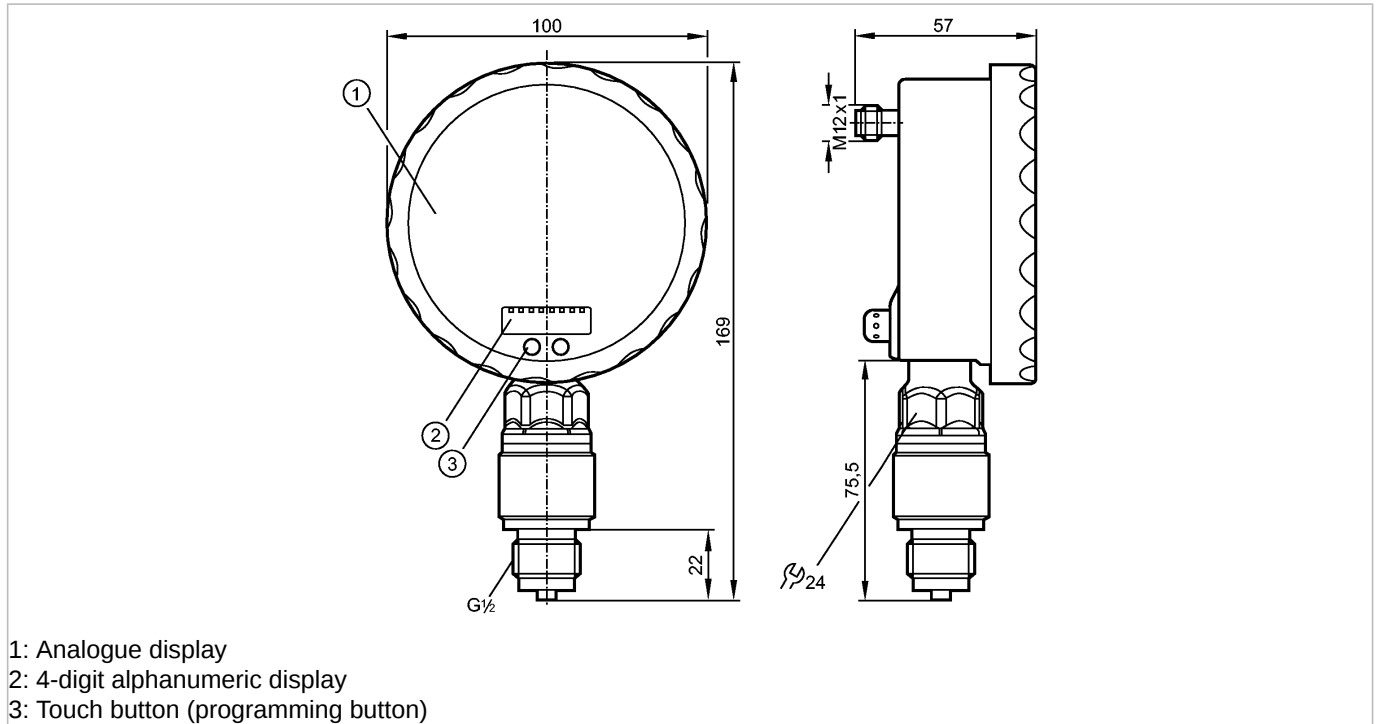


**PG2454**

PG-010-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

Analogue display 0...350° rotatable

Resolution 0.25%

Pointer not visible when unit disconnected

Process connection: G 1/2

2 outputs

OUT1 = switching output

OUT2 = analogue output

analogue display, 4-digit alphanumeric display

Measuring range: -1...10 bar / -14.4...145 psi

**Application**

Application	Type of pressure: relative pressure Liquids and gases	
Pressure rating	50 bar	725 psi
Bursting pressure min.	150 bar	2175 psi
MAWP (for applications according to CRN)	38 bar	551 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

**PG2454**

PG-010-REB12-MFRKG/US/ /P

**Pressure sensors**

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]	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	-1...10 bar	-14.4...145 psi
Setting range		
Set point, SP	-0.96...16.00 bar	-14.0...232.0 psi
Reset point, rP	-1.00...15.96 bar	-14.4...231.6 psi
Analogue start point, ASP	-1.00...13.50 bar	-14.4...195.8 psi
Analogue end point, AEP	1.50...16.00 bar	21.8...232.0 psi
in steps of	0.02 bar	0.2 psi

Accuracy / deviations	
Accuracy / deviations (in % of the span) Turn down 1:1	
Switch point accuracy	< ± 0.5
Characteristics deviation *)	< ± 0.25 (BFSL) / < ± 0.5 (LS)
Hysteresis	< ± 0.25
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	< ± 0.2
Greatest TEMPCO of the span	< ± 0.2

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**

**PG2454**

PG-010-REB12-MFRKG/US/ /P

**Pressure sensors**

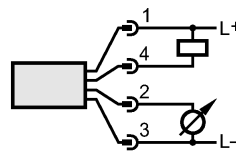
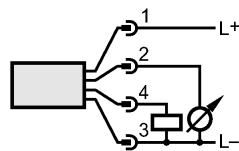
EC pressure equipment directive 97/23/EC	Article 3, section 3 - sound engineering practice	
EMC	DIN EN 61000-6-2 DIN EN 61000-6-3	
Shock resistance	DIN EN 60068-2-27:	50 g (11 ms)
Vibration resistance	DIN EN 60068-2-6:	20 g (10...2000 Hz)
MTTF [Years]	103	

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; PTFE; viewing glass: laminated safety glass 4 mm	
Switching cycles min.	100 million	
Weight [kg]	0.617	

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.)	16 bar	232 psi

Electrical connection	
Connection	M12 connector; Gold-plated contacts

**Wiring**



**Remarks**

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