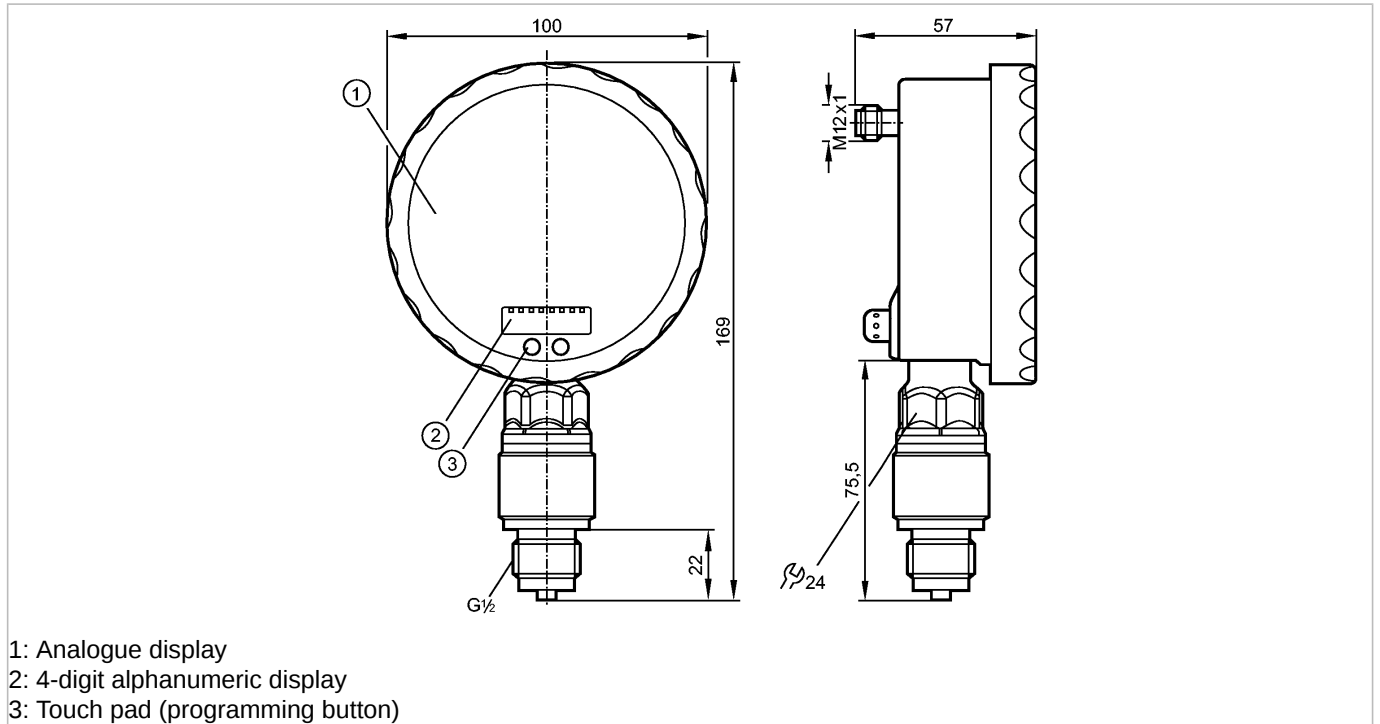


PG2458

PG-,25BREB12-MFRKG/US/ /P

Pressure sensors



Product characteristics

Electronic pressure sensor with analog display

Quick disconnect

Analog display 0...350° rotatable

Resolution 0.25%

Pointer not visible when unit disconnected

Process connection: G 1/2

2 Output

OUT1 = Switching output

OUT2 = Analog output

analog display, 4-digit alphanumeric display

Measuring range: -12.5...250 mbar / -5.0...100.4 inH2O

Application

Application	Type of pressure: relative pressure Liquids and gases	
Pressure rating	10000 mbar	4015 inH2O
Bursting pressure min.	30000 mbar	12044 inH2O
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

PG2458

PG-,25BREB12-MFRKG/US/ /P

Pressure sensors

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]	75	
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	-12.5...250 mbar	-5.0...100.4 inH2O
Setting range		
Set point, SP	-11.5...400.0 mbar	-4.6...160.6 inH2O
Reset point, rP	-12.5...399.0 mbar	-5.0...160.2 inH2O
Analog start point, ASP	-12.5...337.5 mbar	-5.0...135.6 inH2O
Analog end point, AEP	50.0...400.0 mbar	20.0...160.6 inH2O
in steps of	0.5 mbar	0.2 inH2O

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 analog 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
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PG2458

PG-,25BREB12-MFRKG/US/ /P

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]		103

Mechanical data

Process connection	G ½	
Materials (wetted parts)	ceramics (Al ₂ O ₃); 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]	0.612	

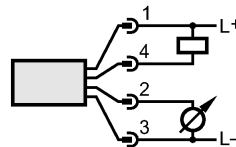
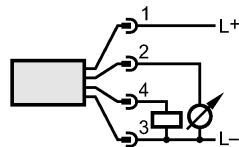
Displays / operating elements

Display	Display unit	2 x LED green
	Switching status	LED yellow
	Switch points	LED ring
	Function display	4-digit alphanumeric display
	Measured values	analog display, 4-digit alphanumeric display
Extended display range (max.)	400 mbar	160.6 inH ₂ O

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 < 10 K ***) in% of the span / 6 months</p>
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Pack quantity [piece]	1
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