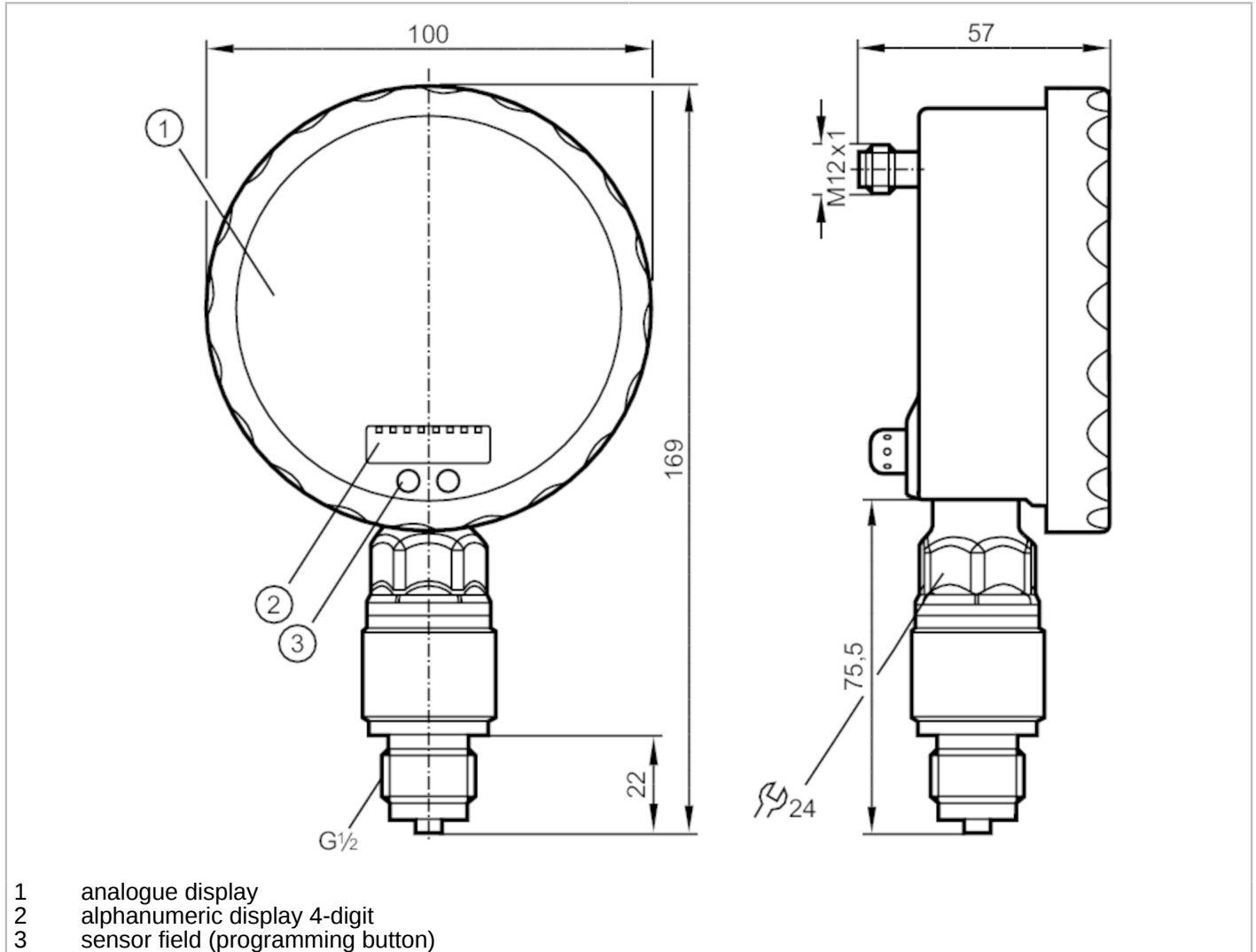


PG2458



Pressure sensor with analogue display

PG-,25BREB12-MFRKG/US/ IP



Application	
Application	for industrial applications; Safety manometer (S) based on DIN EN 837-1
Media	liquids and gases
Medium temperature [°C]	-25...80
Pressure rating	6000 mbar 2400 inH2O
Min. bursting pressure	30000 mbar 12044 inH2O
Type of pressure	relative pressure
Electrical data	
Operating voltage [V]	18...32 DC
Current consumption [mA]	< 70; (24 V)
Min. insulation resistance [MΩ]	100; (500 V DC)
Protection class	III
Reverse polarity protection	yes
Power-on delay time [s]	6
Integrated watchdog	yes



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Inputs / outputs	
Number of inputs and outputs	Number of digital outputs: 1; Number of analogue outputs: 1
Outputs	
Total number of outputs	2
Output signal	switching signal; analogue signal; (configurable)
Electrical design	PNP/NPN
Number of digital outputs	1
Output function	normally open / normally closed; (parameterisable)
Max. voltage drop switching output DC [V]	2
Permanent current rating of switching output DC [mA]	250
Switching frequency DC [Hz]	75
Number of analogue outputs	1
Analogue current output [mA]	4...20, invertible; (scalable)
Max. load [Ω]	$(U_b - 10 \text{ V}) / 20 \text{ mA}$
Short-circuit protection	yes
Type of short-circuit protection	pulsed
Overload protection	yes
Measuring/setting range	
Measuring range	-12.5...250 mbar -5...100.4 inH2O
Set point SP	-11.5...400 mbar -4.6...160.6 inH2O
Reset point rP	-12.5...399 mbar -5...160.2 inH2O
Analogue start point	-12.5...337.5 mbar -5...135.6 inH2O
Analogue end point	50...400 mbar 20...160.6 inH2O
In steps of	0.5 mbar 0.2 inH2O
Accuracy / deviations	
Switch point accuracy [% of the span]	$< \pm 0,5$; (Turn down 1:1)
Repeatability [% of the span]	$< \pm 0,1$; (with temperature fluctuations $< 10 \text{ K}$; Turn down 1:1)
Characteristics deviation [% of the span]	$< \pm 0,25$ (BFSL) / $< \pm 0,5$ (LS); (Turn down 1:1; BFSL = Best Fit Straight Line)
Hysteresis deviation [% of the span]	$< \pm 0,25$; (Turn down 1:1)
Long-term stability [% of the span]	$< \pm 0,1$; (Turn down 1:1; per 6 months)
Temperature coefficient zero point [% of the span / 10 K]	$< \pm 0,2$; (0...70 °C)
Temperature coefficient span [% of the span / 10 K]	$< \pm 0,2$; (0...70 °C)

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Response times		
Response time	[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
Operating conditions		
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
	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		
Weight	[g]	612
Materials	stainless steel (1.4404 / 316L); PA; FKM; PTFE; viewing glass: laminated safety glass 4 mm	
Materials (wetted parts)	Al2O3 (ceramics); FKM; stainless steel (1.4404 / 316L)	
Min. pressure cycles	100 million	
Process connection	threaded connection G 1/2 external thread	
Displays / operating elements		
Display	Display unit	2 x LED, green
	switching status	LED, yellow
	switch points	LED ring
	function display	alphanumeric display, 4-digit
	measured values	analogue display, 0...350° rotatable, pointer not visible when unit disconnected
	measured values	alphanumeric display, 4-digit
With scale	yes	
Extended display range (max.)	400 mbar	160.6 inH2O
Remarks		
Remarks	switch point accuracy in the extended display range: 1.5 % of the span	
Pack quantity	1 pcs.	
Electrical connection		
Connector: 1 x M12; Contacts: gold-plated		

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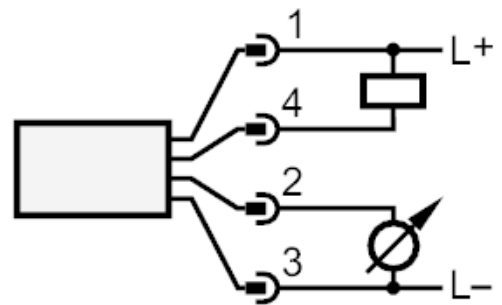
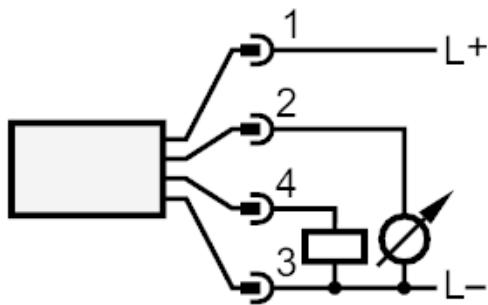


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Connection



OUT1 switching output
OUT2 analogue output