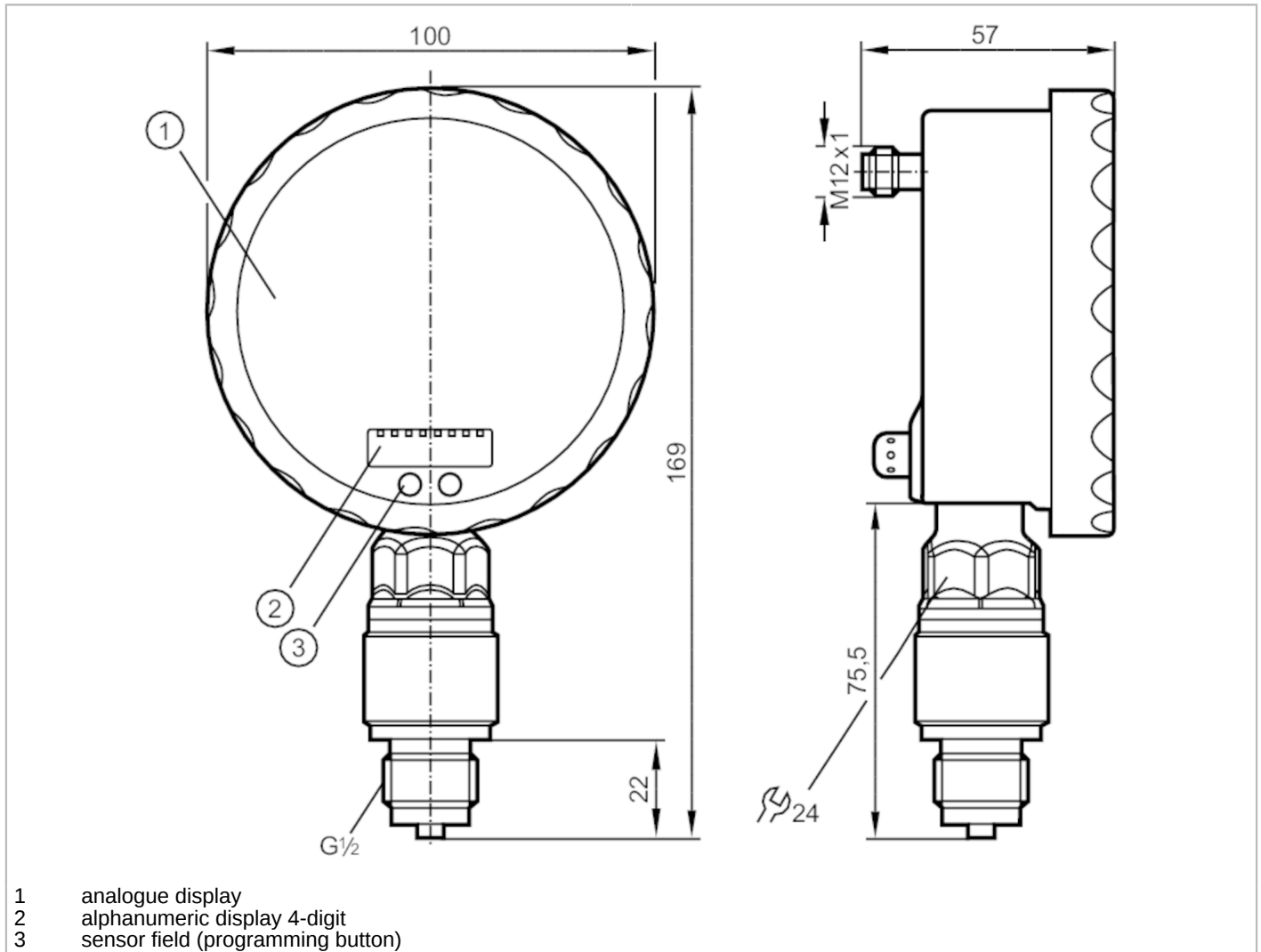


# PG2434



## Pressure sensor with analogue display

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



- 1 analogue display
- 2 alphanumeric display 4-digit
- 3 sensor field (programming button)



Product characteristics	
Number of inputs and outputs	Number of digital outputs: 1; Number of analogue outputs: 1
Measuring range	-1...10 bar      -100...1000 kPa
Process connection	threaded connection G 1/2 external thread
Application	
Special feature	Gold-plated contacts
Application	for industrial applications
Media	liquids and gases
Medium temperature [°C]	-25...80
Min. burst pressure	150 bar      15000 kPa
Pressure rating	50 bar      5000 kPa
Type of pressure	relative pressure; vacuum
MAWP for applications according to CRN [bar]	38
Electrical data	
Operating voltage [V]	18...32 DC



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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

### Inputs / outputs

Number of inputs and outputs	Number of digital outputs: 1; Number of analogue outputs: 1
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### 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 <sub>b</sub> - 10 V) / 20 mA
Short-circuit protection		yes
Type of short-circuit protection		pulsed
Overload protection		yes

### Measuring/setting range

Measuring range	-1...10 bar	-100...1000 kPa
Set point SP	-0.96...16 bar	-96...1600 kPa
Reset point rP	-1...15.96 bar	-100...1596 kPa
Analogue start point	-1...13.5 bar	-100...1350 kPa
Analogue end point	1.5...16 bar	150...1600 kPa
In steps of	0.02 bar	2 kPa

### Accuracy / deviations

Switch point accuracy	[% of the span]	< ± 0,5; (Turn down 1:1)
Repeatability	[% of the span]	< ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1)
Characteristics deviation	[% of the span]	< ± 0,25 (BFSL) / < ± 0,5 (LS); (Turn down 1:1; BFSL = Best Fit Straight Line)
Hysteresis deviation	[% of the span]	< ± 0,25; (Turn down 1:1)
Long-term stability	[% of the span]	< ± 0,1; (Turn down 1:1; per 6 months)
Temperature coefficient zero point	[% of the span / 10 K]	< ± 0,2; (0...70 °C)

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Temperature coefficient span [% of the span / 10 K]	< ± 0,2; (0...70 °C)
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### Response times

Response time [ms]	< 9
Damping process value 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	DIN EN 61000-6-2	
	DIN EN 61000-6-3	
CPA approval	accuracy class	Class 1.0
Shock resistance	DIN EN 60068-2-27	50 g (11 ms)
Vibration resistance	DIN EN 60068-2-6	10 g (10...2000 Hz)
MTTF [years]		97
UL approval	File number UL	E174189
Pressure Equipment Directive	Sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	

### Mechanical data

Weight [g]	567.1
Dimensions [mm]	169 x 100 x 57
Materials	stainless steel (316L/1.4404); PA; FKM; PTFE; viewing glass: laminated safety glass 4 mm
Materials (wetted parts)	Al2O3 (ceramics); FKM; stainless steel (316L/1.4404)
Min. pressure cycles	100 million
Process connection	threaded connection G 1/2 external thread
Restrictor element integrated	no (can be retrofitted)

### Displays / operating elements

Display	Display unit	2 x LED, green
	switching status	LED, yellow
	switch points	LED ring, red
	function display	alphanumeric display, red 4-digit
	measured values	analogue display, 0...350° rotatable, pointer not visible when unit disconnected
	measured values	alphanumeric display, red 4-digit
With scale	yes	
Extended display range (max.)	16 bar	1600 kPa

### Remarks

Remarks	switch point accuracy in the extended display range: 1.5 % of the span
Pack quantity	1 pcs.

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### Electrical connection

Connector: 1 x M12; coding: A; Contacts: 4, gold-plated



### Connection

