

PG2452

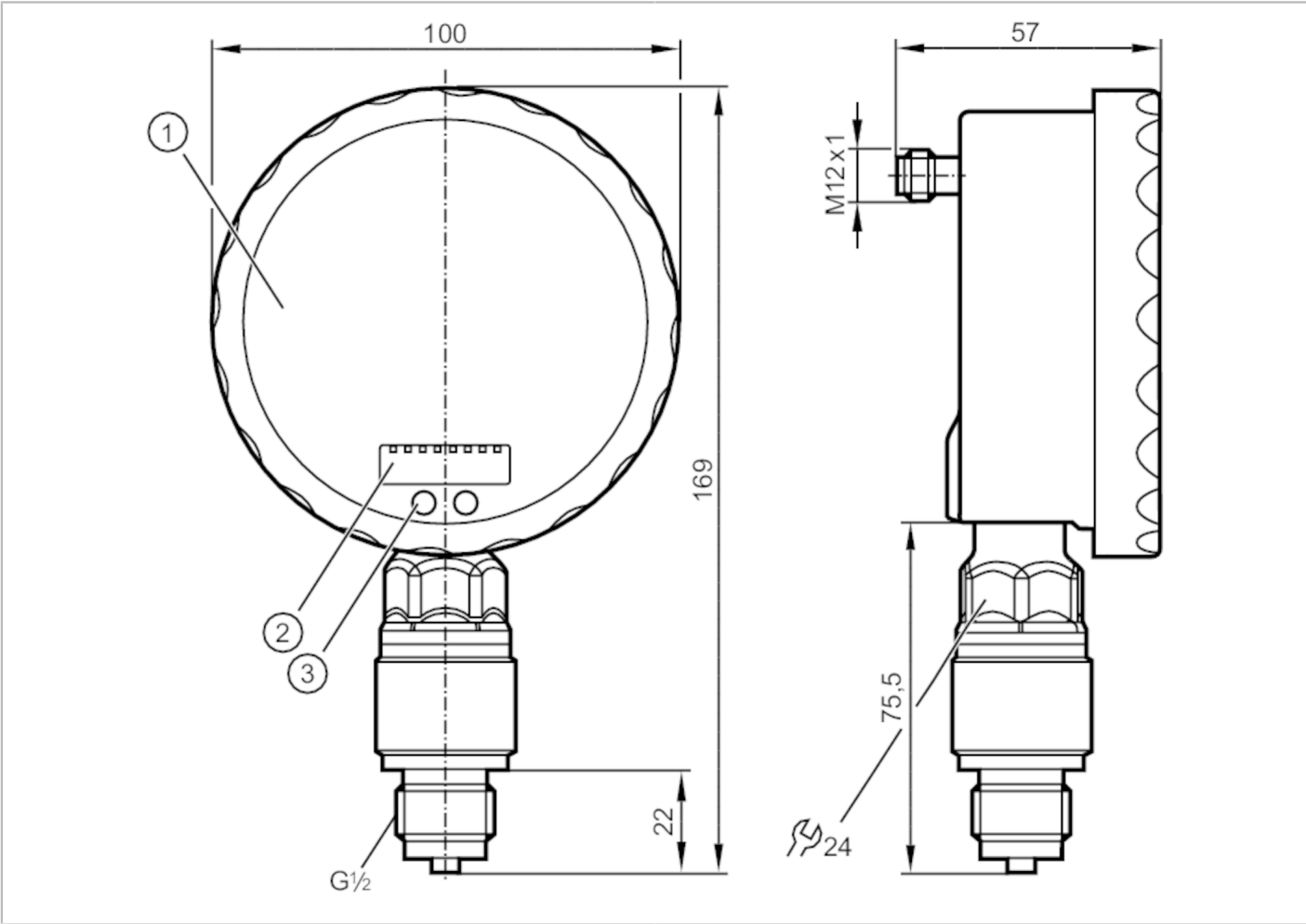


Pressure sensor with analog display

PG-100-REB12-MFRKG/US/ /P

Article to be discontinued

Alternative articles: PG1402
When selecting an alternative article and accessories please note that technical data may differ!



Product characteristics			
Number of inputs and outputs	Number of digital outputs: 1; Number of analog outputs: 1		
Measuring range	0...100 bar	0...1449 psi	
Process connection	threaded connection G 1/2 external thread		
Application			
System	gold-plated contacts		
Application	for industrial applications		
Media	liquids and gases		
Conditionally suitable for	use in gases at pressures > 25 bar only on request		
Medium temperature [°C]	-25...80		
Min. burst pressure	700 bar	9400 psi	70 MPa
Pressure rating	300 bar	4350 psi	30 MPa
Type of pressure	relative pressure		



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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
Inputs / outputs		
Number of inputs and outputs		Number of digital outputs: 1; Number of analog outputs: 1
Outputs		
Total number of outputs		2
Output signal		switching signal; analog signal; (configurable)
Electrical design		PNP/NPN
Number of digital outputs		1
Output function		normally open / closed; (configurable)
Max. voltage drop switching output DC	[V]	2
Permanent current rating of switching output DC	[mA]	250
Switching frequency DC	[Hz]	75
Number of analog outputs		1
Analog current output	[mA]	4...20, invertible; (scalable)
Max. load	[Ω]	(U _b - 10 V) / 20 mA
Short-circuit protection		yes
Type of short-circuit protection		yes (non-latching)
Overload protection		yes
Measuring/setting range		
Measuring range	0...100 bar	0...1449 psi
Set point SP	0.4...160 bar	6...2322 psi
Reset point rP	0...159.6 bar	0...2316 psi
Analog start point	0...135 bar	0...1959 psi
Analog end point	25...160 bar	363...2322 psi
In steps of	0.2 bar	3 psi
Accuracy / deviations		
Switch point accuracy		< ± 0,5; (Turn down 1:1)
	[% of the span]	
Repeatability		< ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1)
	[% of the span]	
Characteristics deviation		< ± 0,25 (BFSL) / < ± 0,5 (LS); (Turn down 1:1; BFSL = Best Fit Straight Line)
	[% of the span]	
Hysteresis deviation		< ± 0,25; (Turn down 1:1)
	[% of the span]	
Long-term stability		< ± 0,1; (Turn down 1:1; per 6 months)
	[% of the span]	



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Temperature coefficient zero point [% of the span / 10 K]	< ± 0,2; (0...70 °C)	
Temperature coefficient span [% of the span / 10 K]	< ± 0,2; (0...70 °C)	
Reaction times		
Response time [ms]	< 9	
Damping process value dAP [s]	0.01...30	
Damping for the analog output dAA [s]	0.01...30	
Step response time analog 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 EN 60068-2-27	50 g (11 ms)
Vibration resistance	DIN EN 60068-2-6	10 g (10...2000 Hz)
MTTF [years]	100	
Pressure equipment directive	sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	
Mechanical data		
Weight [g]	564.2	
Dimensions [mm]	169 x 100 x 57	
Material	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	
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	analog display, 0...350° rotatable, pointer not visible when unit disconnected
	Measured values	alphanumeric display, red 4-digit
With scale	yes	
Extended display range (max.)	160 bar	2322 psi
Remarks		
Remarks	switch point accuracy in the extended display range: 1.5 % of the span	

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Pack quantity

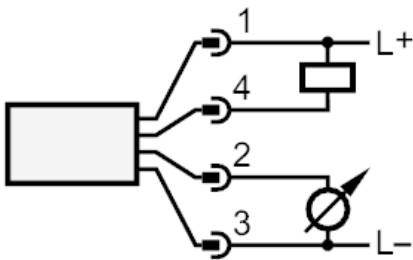
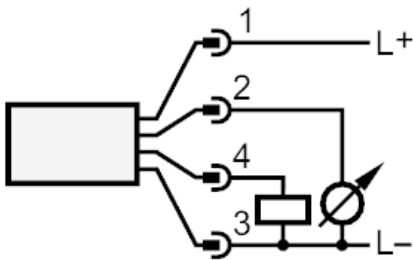
1 pcs.

Electrical connection

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



Connection



OUT1

OUT2

Switching output

analog output