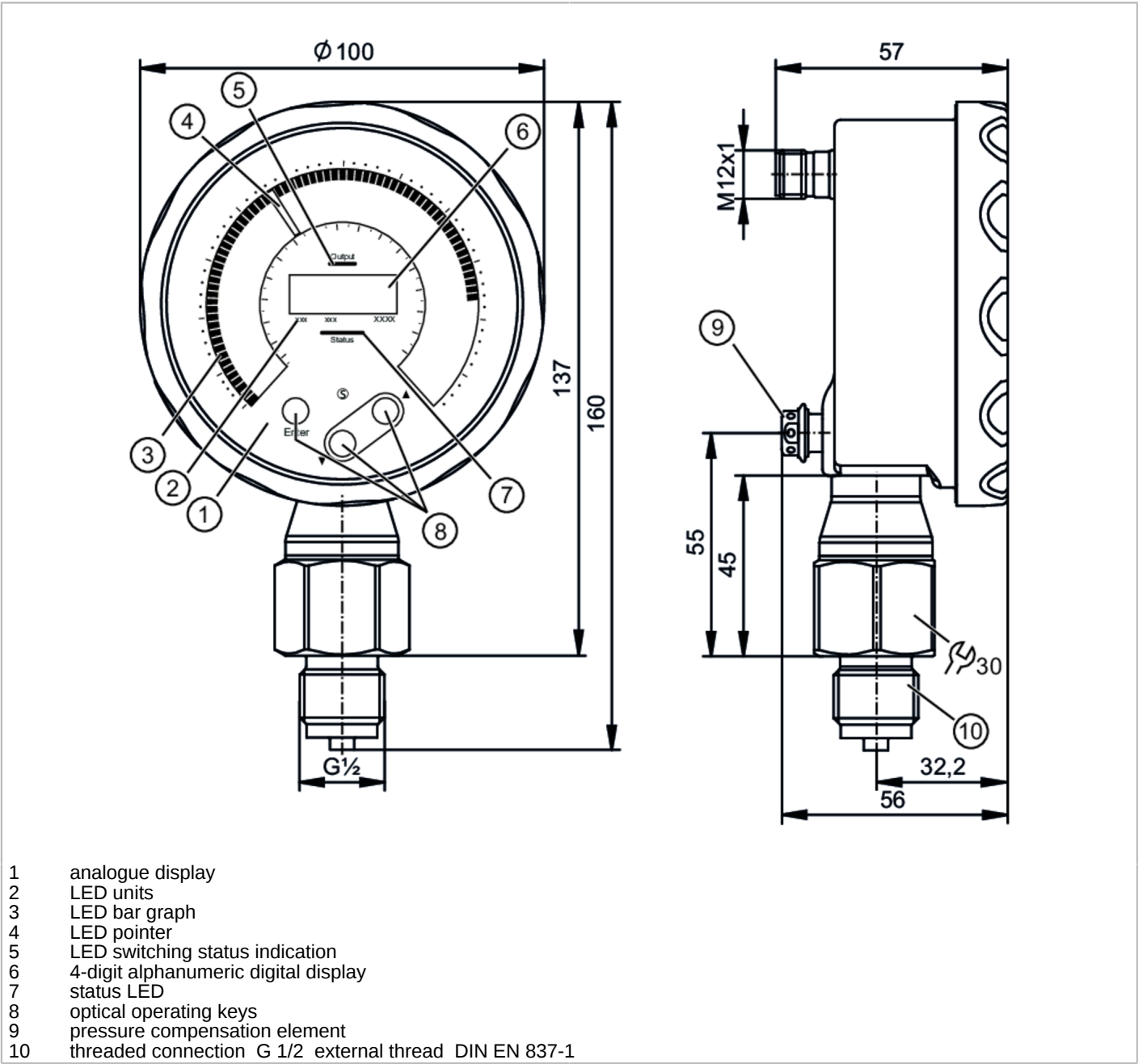


PG1423



Pressure sensor with analogue display

PG-060-REB12-MFRKG/US/ /P



Product characteristics

Number of inputs and outputs	Number of digital outputs: 1; Number of analogue outputs: 1	
Measuring range	0...60 bar	0...870 psi
Process connection	threaded connection G 1/2 external thread DIN EN 837-1	

Application

Special feature	Gold-plated contacts	
Application	for industrial applications	
Media	liquids and gases	
Medium temperature [°C]	-25...80; (higher temperature upon request)	
Min. burst pressure	500 bar	7252 psi



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Pressure rating	150 bar	2175 psi
Vacuum resistance	-1000 mbar	14.5 psi
Type of pressure	relative pressure; vacuum	

Electrical data		
Operating voltage	[V]	18...30 DC
Current consumption	[mA]	25...260
Min. insulation resistance	[MΩ]	100; (500 V DC)
Protection class		III
Reverse polarity protection		yes
Power-on delay time	[s]	< 0.5
Integrated watchdog		yes

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; IO-Link
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]	100
Switching frequency DC [Hz]	125
Number of analogue outputs	1
Analogue current output [mA]	4...20, invertible; (scalable)
Max. load [Ω]	500
Short-circuit protection	yes
Type of short-circuit protection	pulsed
Overload protection	yes

Measuring/setting range		
Measuring range	0...60 bar	0...870 psi
Set point SP	0...60 bar	0...870 psi
Analogue start point	0...48 bar	0...696 psi
Analogue end point	12...60 bar	174...870 psi
In steps of	0.01 bar	1 psi

Measuring range (bar)			
Factory setting	SP1 = 15 bar		
	SP2 = 13.8 bar		
	ASP = 0.00 bar		AEP = 60 bar
	dAP = 0.06 s		dAA = 0.06 s



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Measuring range (psi)			
Factory setting	SP1 = 218 psi		
	SP2 = 200 psi		
	ASP = 0.00 psi		AEP = 870 psi
	dAP = 0.06 s		dAA = 0.06 s
Accuracy / deviations			
Switch point accuracy [% of the span]	< ± 0,5; (DIN EN IEC 62828-1; Turn down 1:1)		
Repeatability [% of the span]	< ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1)		
Characteristics deviation [% of the span]	< ± 0,5; (DIN IEC EN 62828-1 incl. zero point and span error, non-linearity, hysteresis; Turn down 1:1)		
Zero-point stabilisation [% of the span]	IO-Link, analogue output	0,2; (see operating instructions zero-point behaviour)	
	display, switching output	0,1	
Hysteresis deviation [% of the span]	< ± 0,15; (Turn down 1:1 -25...80°C)		
Long-term stability [% of the span]	< ± 0,1; (Turn down 1:1; per year)		
Temperature coefficient zero point [% of the span / 10 K]	< ± 0,25; (0...70 °C)		
Temperature coefficient span [% of the span / 10 K]	< ± 0,25; (0...70 °C)		
Response times			
Min. response time of switching output (dAP) [ms]	3		
Damping process value dAP [s]	0...99.99		
Damping for the analogue output dAA [s]	0...99.99		
Step response time analogue output [ms]	7		
Interfaces			
Communication interface	IO-Link		
Transmission type	COM3 (230,4 kBaud)		
IO-Link revision	1.1		
SDCI standard	IEC 61131-9		
Profiles	Smart Sensor - SSP 4.2.1	Measuring and Switching Sensor, high resolution, 1 channel	
	BLOB	Binary Large Object transfer	
	Common - I&D	Identification and Diagnosis	
	Extension	Sensor Control Wide	
	Extension	Quantity detection, switches when value exceeds the setpoint	
	Function	Locator	
	Function	ProductURI	
SIO mode	yes		
Required master port type	A		
Min. process cycle time [ms]	1.3		



Pressure sensor with analogue display

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IO-Link resolution pressure [bar]	0.002	
IO-Link process data (cyclical)	function	bit length
	pressure	32
	device status	4
	binary switching information pressure	2
IO-Link functions (acyclical)	application specific tag; internal temperature; operating hours counter; switching cycles counter; Pressure peak counter	
Supported DeviceIDs	Type of operation	DeviceID
	default	1872

Operating conditions

Ambient temperature [°C]	-25...70
Storage temperature [°C]	-40...100
Protection	IP 67; IP 69; (to DIN EN 60529)

Tests / approvals

EMC	DIN EN 61326-1	
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]	115	
Embedded software included	yes	
UL approval	UL approval no.	J061
	File number UL	E174189

Mechanical data

Weight [g]	702.7	
Housing	manometer housing	
Dimensions [mm]	160 x 100 x 57	
Materials	Housing: stainless steel (316L/1.4404); M12 connector: PPSU; Sealing: FKM; pressure compensation element: PTFE; viewing glass: laminated safety glass 4 mm	
Materials (wetted parts)	measuring cell: Al ₂ O ₃ (ceramics); Process connection: stainless steel (316L/1.4404); Sealing: FKM	
Min. pressure cycles	100 million	
Process connection	threaded connection G 1/2 external thread DIN EN 837-1	
Restrictor element integrated	no (can be retrofitted)	

Displays / operating elements

Display	Pointer	LED, white ; 72 steps
	LED bar graph	multi-colour ; 72 steps
	measured values	alphanumeric display, white 4-digit
	switching status	LED, yellow
	device status	LED, red/green
	Display unit	LED, white
	Display	display rotation: 320°
Display unit	bar; psi	
Operating elements	3	optical operating keys

Remarks

Pack quantity	1 pcs.
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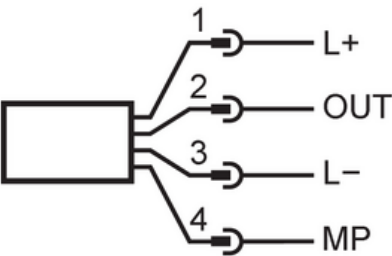
PG-060-REB12-MFRKG/US/ /P

Electrical connection

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



Connection



1	L+	
2	OUT	AO
3	L-	
4	MP	DO (NO/NC), IO-Link