PB5003

Pressure sensor with LED bar display

PB-025-SBR14-HFPKG/SS/ /V

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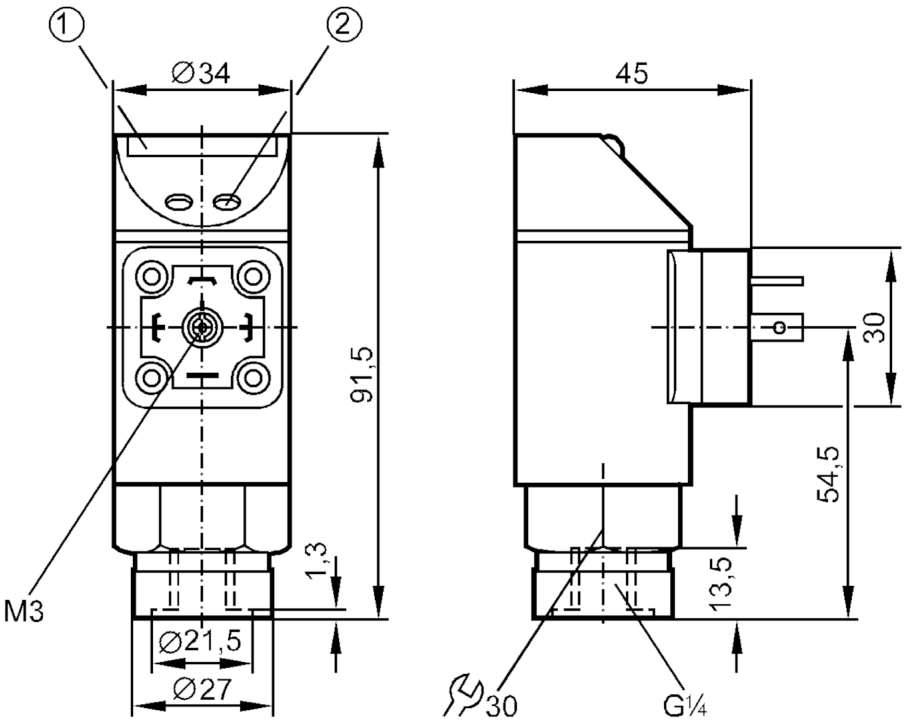

1 LED bar display
2 programming button

Product characteristics		
Number of inputs and outputs		Number of digital outputs: 1
Measuring range	[bar]	0...25
Process connection		threaded connection G 1/4 internal thread
Application		
Application		for industrial applications
Media		liquids and gases
Medium temperature	[°C]	-25...80
Min. bursting pressure	[bar]	350
Pressure rating	[bar]	100
Type of pressure		relative pressure
Electrical data		
Operating voltage	[V]	18...30 DC
Current consumption	[mA]	< 50
Min. insulation resistance	[MΩ]	100; (500 V DC)
Protection class		III

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Reverse polarity protection		yes
Power-on delay time	[s]	0.2
Integrated watchdog		yes
Inputs / outputs		
Number of inputs and outputs		Number of digital outputs: 1
Outputs		
Total number of outputs		1
Output signal		switching signal
Electrical design		PNP
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]	10
Short-circuit protection		yes
Type of short-circuit protection		pulsed
Overload protection		yes
Measuring/setting range		
Measuring range	[bar]	0...25
Set point SP	[bar]	1.25...25
Reset point rP	[bar]	0.75...24.5
In steps of	[bar]	0.25
Note on hysteresis		adjustable
Accuracy / deviations		
Switch point accuracy	[X16]	< ± 2,0
Repeatability	[X16]	< ± 0,25; (with temperature fluctuations < 10 K)
Temperature drift per 10 K		< ± 0.3
Software / programming		
Adjustment of the switch point		programming button
Operating conditions		
Ambient temperature	[°C]	-25...80
Storage temperature	[°C]	-40...100
Protection		IP 65
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 61000-4-6 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)

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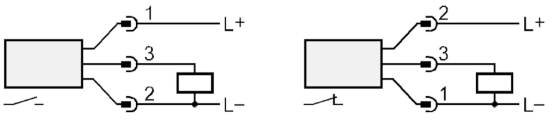
Mechanical data		
Materials	EPDM/X; FKM; NBR; PA; PBT; PC; PTFE; stainless steel (1.4301 / 304)	
Materials (wetted parts)	FKM; ceramics; stainless steel (1.4305 / 303)	
Min. pressure cycles	100 million	
Process connection	threaded connection G 1/4 internal thread	
Restrictor element integrated	no (can be retrofitted)	

Displays / operating elements		
Display	switching status	LED, yellow
	measured values	10 x LED, green Resolution 10% of the final value

Remarks	
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x valve type A DIN (DIN EN 175301-803)