

PN5007



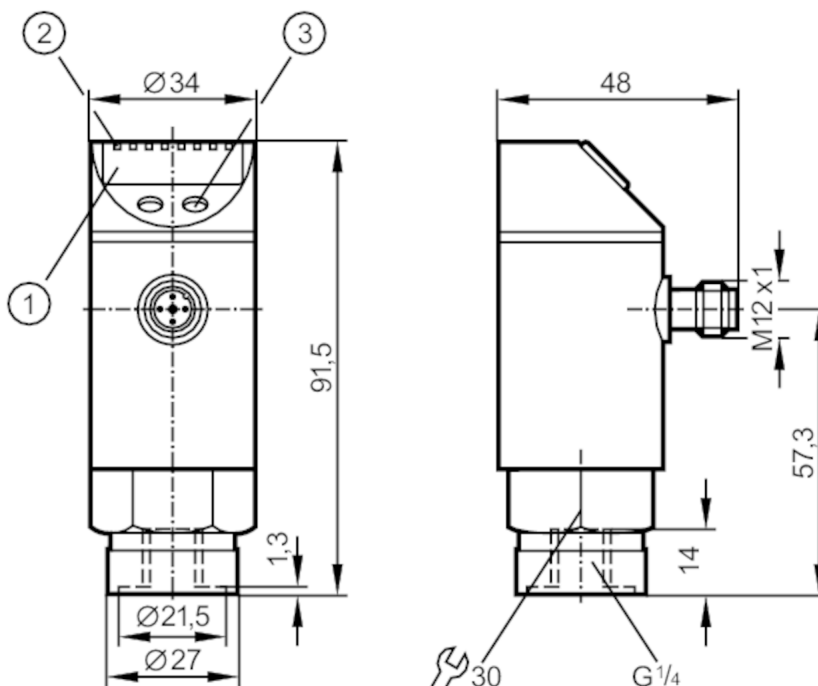
Pressure sensor with display

PN-001BRBR14-HFPKG/US/ IV

Article no longer available - archive entry

Alternative articles: PN7097

When selecting an alternative article and accessories please note that technical data may differ!



- 1 alphanumeric display 4-digit
- 2 LEDs Display unit / switching status
- 3 programming button



Product characteristics

Number of inputs and outputs	Number of digital outputs: 1		
Measuring range	0...1 bar	0...1000 mbar	0...14.5 psi
Process connection	threaded connection G 1/4 internal thread		

Application

Special feature	Gold-plated contacts		
Application	for industrial applications		
Media	liquids and gases		
Medium temperature [°C]	-25...80		
Min. bursting pressure	30000 mbar	450 psi	
Pressure rating	10000 mbar	145 psi	
Type of pressure	relative pressure		

Electrical data

Operating voltage [V]	18...36 DC; (to SELV/PELV)		
Current consumption [mA]	< 50		
Min. insulation resistance [MΩ]	100; (500 V DC)		
Protection class	III		



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Reverse polarity protection	yes
Overvoltage protection	yes; (< 40 V)
Power-on delay time [s]	0.3
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]	< 170
Short-circuit protection	yes
Type of short-circuit protection	pulsed
Measuring/setting range	
Measuring range	0...1 bar 0...1000 mbar 0...14.5 psi
Set point SP	10...1000 mbar 0.2...14.5 psi
Reset point rP	5...995 mbar 0.1...14.4 psi
In steps of	5 mbar 0.1 psi
Accuracy / deviations	
Switch point accuracy [X21]	< ± 0,5
Repeatability [X21]	< ± 0,1; (with temperature fluctuations < 10 K)
Characteristics deviation [X21]	< ± 0,25 (BFSL) / < ± 0,5 (LS); (BFSL = Best Fit Straight Line; LS = limit value setting)
Hysteresis deviation [X21]	< ± 0,25
Long-term stability [X21]	< ± 0,05; (per 6 months)
Temperature coefficient zero point [X22]	0,2; (-20...80 °C)
Temperature coefficient span [X22]	0,2; (-20...80 °C)
Response times	
Delay time programmable dS, dr [s]	0; 0,2...50
Software / programming	
Parameter setting options	hysteresis / window; normally open / normally closed; switch-on/switch-off delay; Damping; Display unit
Operating conditions	
Ambient temperature [°C]	-20...80
Storage temperature [°C]	-40...100
Protection	IP 65

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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)

Mechanical data

Weight	[g]	258.8
Materials	stainless steel (1.4301 / 304); stainless steel (1.4404 / 316L); PC; PBT; PEI; FKM; PTFE	
Materials (wetted parts)	stainless steel (1.4305 / 303); ceramics; FKM	
Min. pressure cycles	100 million	
Process connection	threaded connection G 1/4 internal thread	

Displays / operating elements

Display	Display unit	4 x LED, green
	switching status	LED, yellow
	function display	alphanumeric display, 4-digit
	measured values	alphanumeric display, 4-digit
Display unit	mbar; kPa; psi; inHg	

Remarks

Pack quantity	1 pcs.
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Electrical connection

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



Connection

