

PN9023

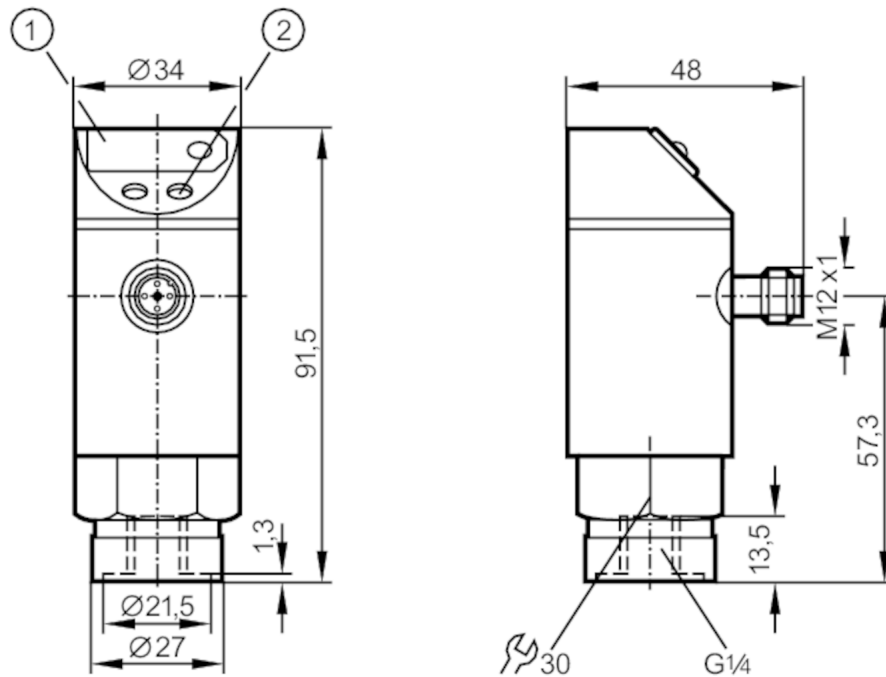


Pressure sensor with display

PN-025-SBR14-LFPKG/US/ IV

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replaced by: PN3003



- 1 7-segment LED display
- 2 programming button



Application

Media	liquids and gases
Medium temperature [°C]	-25...80
Pressure rating [bar]	100
Min. bursting pressure [bar]	350
Type of pressure	relative pressure

Electrical data

Operating voltage [V]	20...30 DC
Current consumption [mA]	< 60
Min. insulation resistance [MΩ]	100; (500 V DC)
Protection class	III
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; 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																				
Number of digital outputs	1																				
Max. voltage drop switching output DC [V]	2																				
Permanent current rating of switching output DC [mA]	250																				
Number of analogue outputs	1																				
Analogue voltage output [V]	0...10																				
Min. load resistance [Ω]	2000																				
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]	0.2...25																				
Reset point rP [bar]	0.1...24.8																				
In steps of [bar]	0.1																				
Accuracy / deviations																					
Switch point accuracy [% of the final value]	$< \pm 1,5$																				
Repeatability [% of the final value]	$< \pm 0,25$; (with temperature fluctuations < 10 K)																				
Characteristics deviation [% of the final value]	$< \pm 1,0$																				
Temperature drift per 10 K	$< \pm 0.3$																				
Response times																					
Switching frequency for a given set response time of one output	<table border="1"> <thead> <tr> <th>Ansprechzeit (dAP) [ms]</th> <th>3</th> <th>6</th> <th>10</th> <th>17</th> <th>30</th> <th>60</th> <th>125</th> <th>250</th> <th>500</th> </tr> </thead> <tbody> <tr> <td>Schaltfrequenz [Hz]</td> <td>170</td> <td>80</td> <td>50</td> <td>30</td> <td>16</td> <td>8</td> <td>4</td> <td>2</td> <td>1</td> </tr> </tbody> </table>	Ansprechzeit (dAP) [ms]	3	6	10	17	30	60	125	250	500	Schaltfrequenz [Hz]	170	80	50	30	16	8	4	2	1
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Schaltfrequenz [Hz]	170	80	50	30	16	8	4	2	1												
Response time [ms]	at rectangular pressure characteristic; switch point (SPx) = 70 %; reset point (rPx) = 30 %																				
Delay time programmable dS, dr [s]	0, 0,2,...10, 11,...50																				
Max. response time analogue output [ms]	3																				
Software / programming																					
Adjustment of the switch point	programming button																				
Operating conditions																					
Ambient temperature [$^{\circ}$ C]	-25...80																				
Storage temperature [$^{\circ}$ 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 61000-4-6 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

Materials	EPDM/X; FKM; NBR; PBT; PC; 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

Displays / operating elements

Display	switching status	LED, red
	function display	7-segment LED display
	measured values	7-segment LED display

Remarks

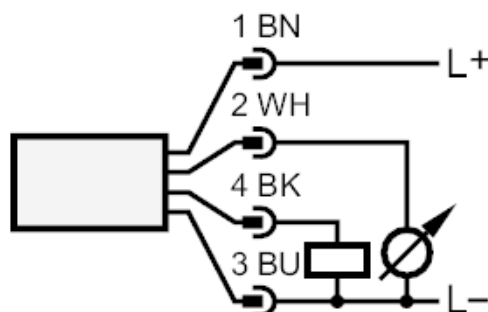
Pack quantity	1 pcs.
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Electrical connection

Connector: 1 x M12



Connection



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