

PN9027

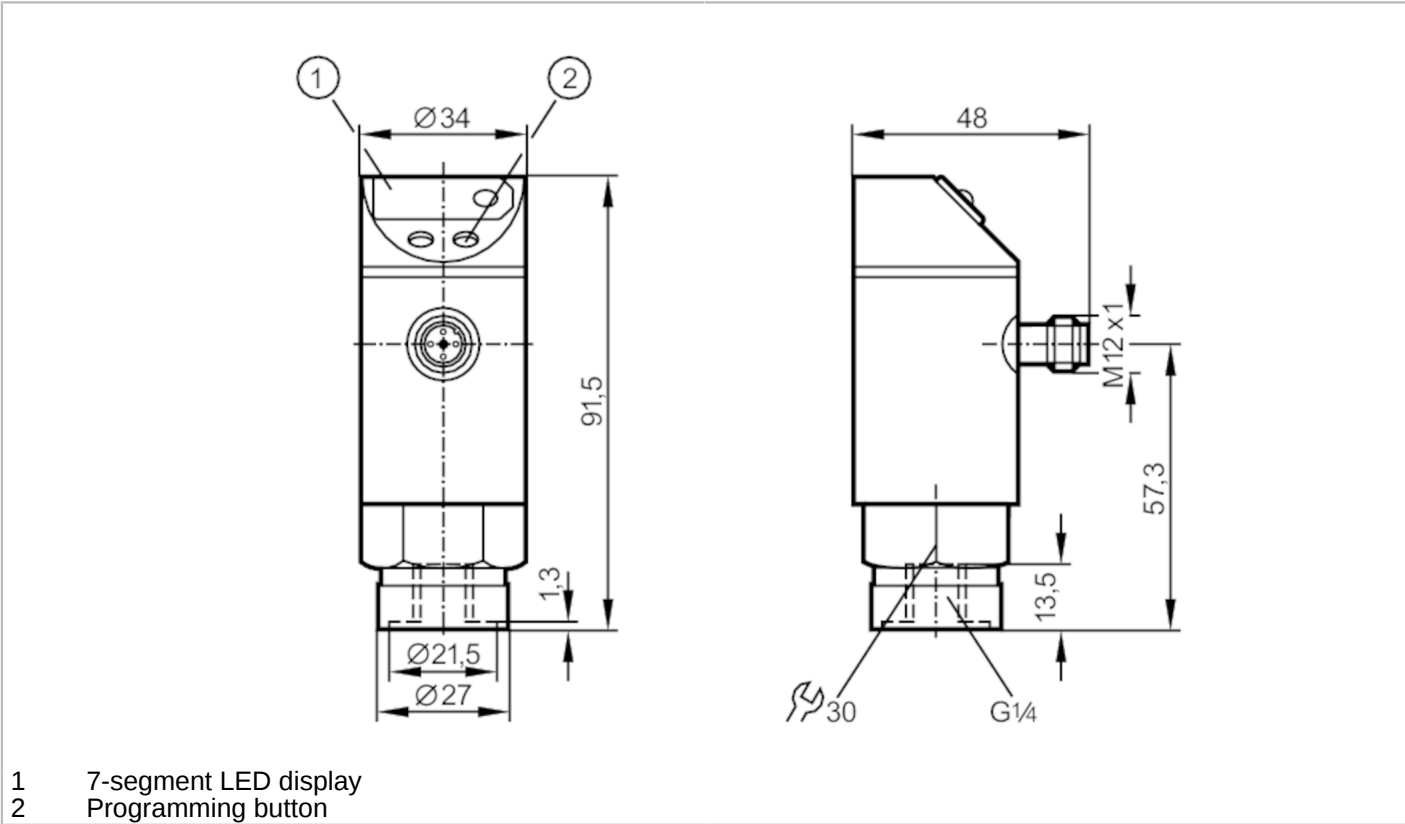


Pressure sensor with display

PN-001-RBR14-LFPKG/US/ IV

Article no longer available - archive entry

Alternative articles: PN3007
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 [bar]	0...1
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]	30
Pressure rating [bar]	10
Type of pressure	relative pressure



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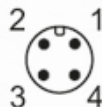
Electrical data		
Operating voltage	[V]	20...30 DC
Current consumption	[mA]	< 60
Min. insulation resistance	[MΩ]	100; (500 V DC)
Protection class		III
Reverse polarity protection		yes
Power-on delay time	[s]	0.2
Integrated watchdog		yes
Inputs / outputs		
Number of inputs and outputs		Number of digital outputs: 1; Number of analog outputs: 1
Outputs		
Total number of outputs		2
Output signal		switching signal; analog 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 analog outputs		1
Analog voltage output	[V]	0...10
Min. load resistance	[Ω]	2000
Short-circuit protection		yes
Type of short-circuit protection		yes (non-latching)
Overload protection		yes
Measuring/setting range		
Measuring range	[bar]	0...1
Set point SP	[bar]	0.02...1
Reset point rP	[bar]	0.01...0.99
In steps of	[bar]	0.01
Accuracy / deviations		
Switch point accuracy	[% of the final value]	< ± 1,5
Repeatability	[% of the final value]	< ± 0,25; (with temperature fluctuations < 10 K)
Characteristics deviation	[% of the final value]	< ± 1,0
Temperature drift per 10 K		< ± 0.3

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Reaction times											
Switching frequency for a given set response time of one output	Response time (dAP)	[ms]	3	6	10	17	30	60	125	250	500
	Switching frequency	[Hz]	170	80	50	30	16	8	4	2	1
Response time	[ms]	at rectangular pressure characteristic; Set point (SPx) = 70 %; Reset point (rPx) = 30 %									
Delay time programmable dS, dr	[s]	0, 0,2,...10, 11,...50									
Max. response time analog output	[ms]	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)				
Mechanical data											
Material	EPDM/X; FKM; NBR; 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										
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.										
Electrical connection											
Connector: 1 x M12											
											

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Connection

