

PN3027



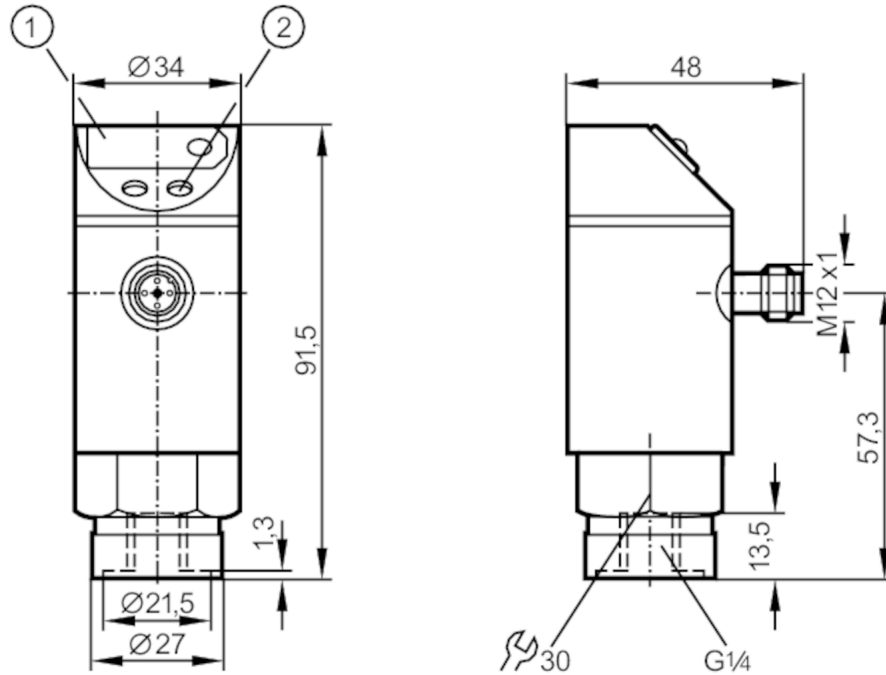
Pressure sensor with display

PN-001-RBR14-KFPKG/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!



- 1 7-segment LED display
- 2 Programming button



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

System	gold-plated contacts
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 current output [mA]	4...20
Max. load [Ω]	500
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									
Parameter setting options	hysteresis / window; normally open / closed; switch-on/switch-off delay; Damping									
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; PA; PBT; PC; PTFE; stainless steel (1.4301 / 304)									
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	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; Contacts: gold-plated										

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Connection

