

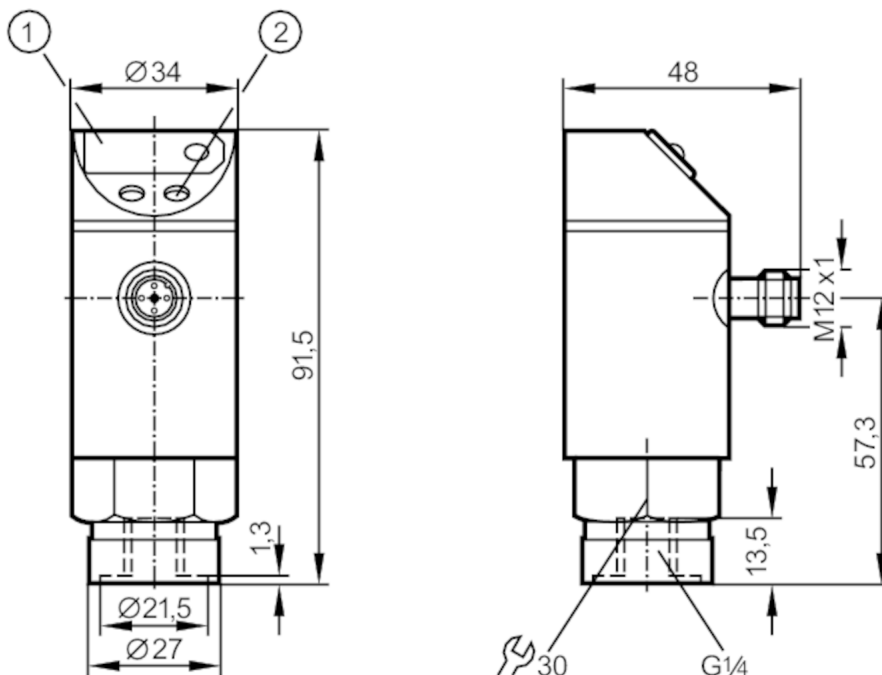
PN3056



Pressure sensor with display

PN-2,5-RDR14-KFPKG/US/ IV

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- 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...2.5
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]	50
Pressure rating [bar]	20
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



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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...2.5									
Set point SP [bar]			0.02...2.5									
Reset point rP [bar]			0.01...2.48									
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									
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									

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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 (1.4404 / 316L); stainless steel (1.4539 / 904L)
Materials (wetted parts)	FKM; ceramics; stainless steel (1.4539 / 904L)
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; coding: A; Contacts: gold-plated



Connection

