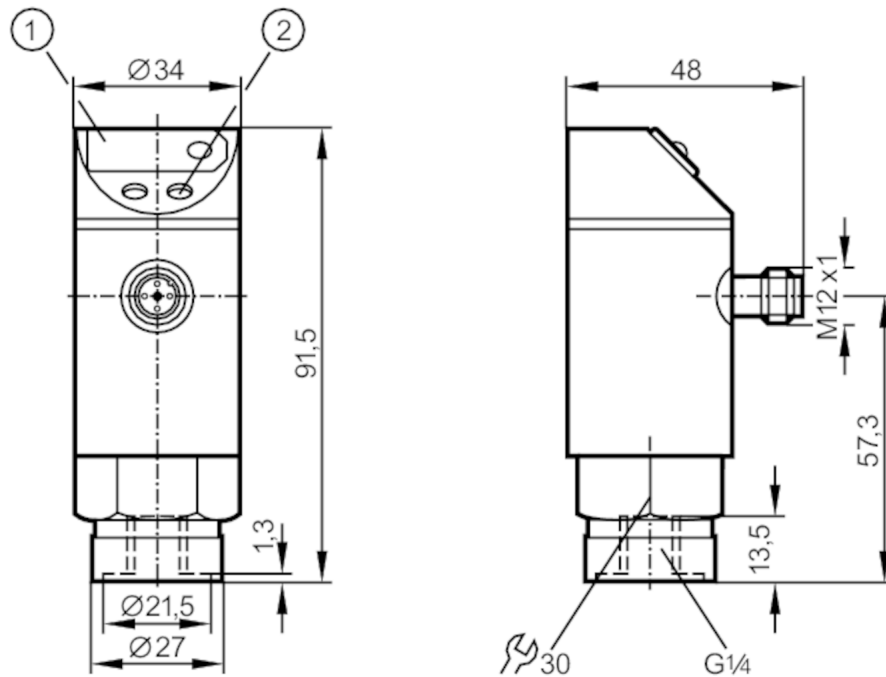




Pressure sensor with display

PN-001-RDR14-KFPKG/US/ IV

Article no longer available - archive entry



- 1 7-segment LED display
- 2 programming button



Product characteristics

Number of inputs and outputs	Number of digital outputs: 1; Number of analogue outputs: 1
Measuring range [bar]	0...1
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 [bar]	30
Pressure rating [bar]	10
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 analogue outputs: 1									
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 current output [mA]		4...20									
Max. load [Ω]		500									
Short-circuit protection		yes									
Type of short-circuit protection		pulsed									
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									
Response 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; 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									
Parameter setting options		hysteresis / window; normally open / normally closed; switch-on/switch-off delay; Damping									

PN3057



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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

Materials	EPDM/X; FKM; PA; PBT; PC; PTFE; stainless steel (316L/1.4404); stainless steel (904L/1.4539)
Materials (wetted parts)	FKM; ceramics; stainless steel (904L/1.4539)
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; coding: A; Contacts: gold-plated



Connection

