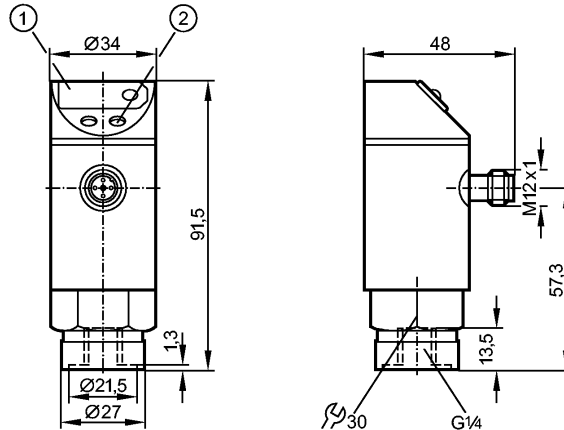




PN-010-RDR14-KFPKG/US/ IV

Pressure sensors



1: 7-segment LED display
 2: Programming button



Product characteristics
 Combined pressure sensor

Quick disconnect

Function programmable

Process connection: G ¼ I

Switching output, Analog output

7-segment LED display

Measuring range: 0...10 bar

Application

Application

Type of pressure: relative pressure
 Liquids and gases

Pressure rating	[bar]
Bursting pressure min.	[bar]
Medium temperature	[°C]

	50
	150
	-25...80

Electrical data

Electrical design

Operating voltage	[V]
Current consumption	[mA]
Insulation resistance	[MΩ]

	DC PNP
	20...30 DC
	< 60
	> 100 (500 V DC)

Protection class

Reverse polarity protection

	III
	yes

Outputs

Output

Switching output, Analog output

Output function	
Current rating	[mA]
Voltage drop	[V]

	normally open / closed programmable, 4...20 mA analog
	250
	< 2

Short-circuit protection

Overload protection

	yes (non-latching)
	yes

Switching frequency for a given set response time of one output *)

Response time (dAP)	3, 6, 10, 17, 30, 60,
[ms]	125, 250, 500
Switching frequency [Hz]	170 80 50 30 16 8 4 2 1


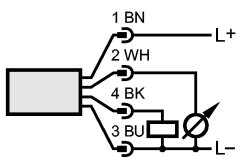
Analog output

Max. load [Ω]

	4...20 mA
	max. 500

Measuring / setting range

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Measuring range	[bar]	0...10
Setting range		
Set point, SP	[bar]	0.10...10.0
Reset point, rP	[bar]	0.05...9.95
in steps of	[bar]	0.05
Accuracy / deviations		
Deviations (% of value of measuring range)		
Switch point accuracy		< ± 1.5
Characteristics deviation		< ± 1.0
Repeatability		< ± 0.25
Temperature drift (/ 10 K)		< ± 0.3
in the temperature range	[°C]	-25...80
Reaction times		
Power-on delay time	[s]	0.2
Delay time programmable dS, dr	[s]	0, 0.2,...10, 11,...50
Response time analog output	[ms]	3
Integrated watchdog		yes
Software / programming		
Programming options		hysteresis / window function; N.O. / N.C.; on delay, off delay; damping
Adjustment of the switch point		Programming button
Environment		
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		
Process connection		G ¼ I
Materials (wetted parts)		FPM (Viton); ceramics; stainless steel (1.4539)
Housing materials		EPDM/X (Santoprene); FPM (Viton); PA; PBT (Pocan); PC (Makrolon); PTFE; stainless steel 316L / 1.4404; stainless steel (1.4539)
Switching cycles min.		100 million
Weight	[kg]	0.29
Displays / operating elements		
Display		Switching status LED red Function display 7-segment LED display Measured values 7-segment LED display
Electrical connection		
Connection		M12 connector; gold-plated contacts
Wiring		
Programming of the output function:		
Hno = hysteresis / N.O.		
Hnc = hysteresis / N.C.		
Fno = window function / N.O.		
Fnc = window function / N.C.		
		
Remarks		
Remarks		*) at rectangular pressure characteristic and setting: switch-on point (SPx) = 70 %, switch-off point (rPx) = 30 %
Pack quantity	[piece]	1

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no longer available - archive entry