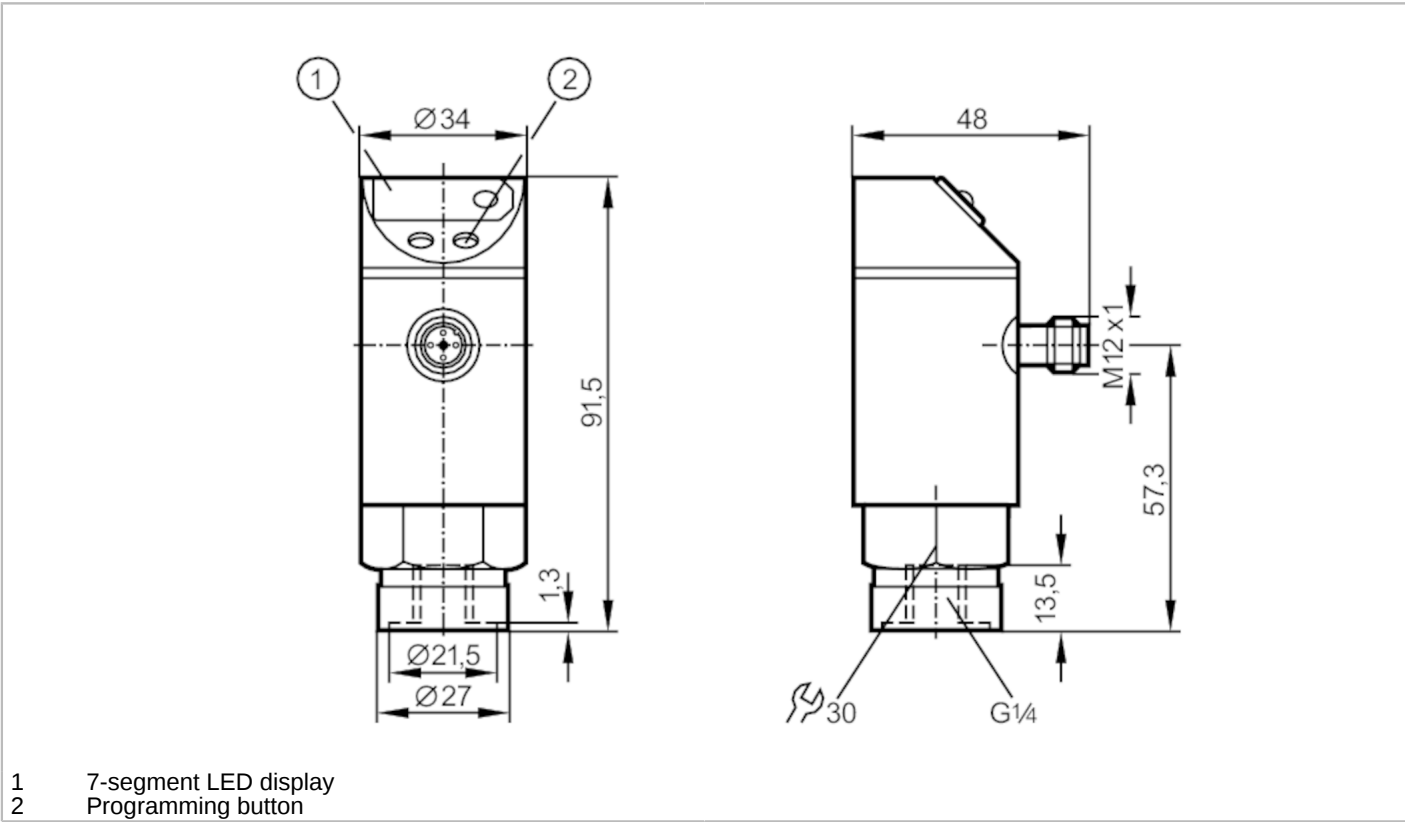




Pressure sensor with display

PN-001KRBR14-QFNKG/US/V

Article no longer available - archive entry



Product characteristics

Number of inputs and outputs	Number of digital outputs: 2
Measuring range [kPa]	0...100
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 [kPa]	1500
Pressure rating [kPa]	500
Type of pressure	relative pressure

Electrical data

Operating voltage [V]	18...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: 2										
Outputs													
Total number of outputs			2										
Output signal			switching signal										
Electrical design			NPN										
Number of digital outputs			2										
Output function			normally open / closed; (configurable)										
Max. voltage drop switching output DC		[V]	2										
Permanent current rating of switching output DC		[mA]	250										
Short-circuit protection			yes										
Type of short-circuit protection			yes (non-latching)										
Overload protection			yes										
Measuring/setting range													
Measuring range		[kPa]	0...100										
Set point SP		[kPa]	1...100										
Reset point rP		[kPa]	0.5...99.5										
In steps of		[kPa]	0.5										
Accuracy / deviations													
Switch point accuracy		[% of the final value]	< ± 1,0										
Repeatability		[% of the final value]	< ± 0,25; (with temperature fluctuations < 10 K)										
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										
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										



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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	2 x 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

