

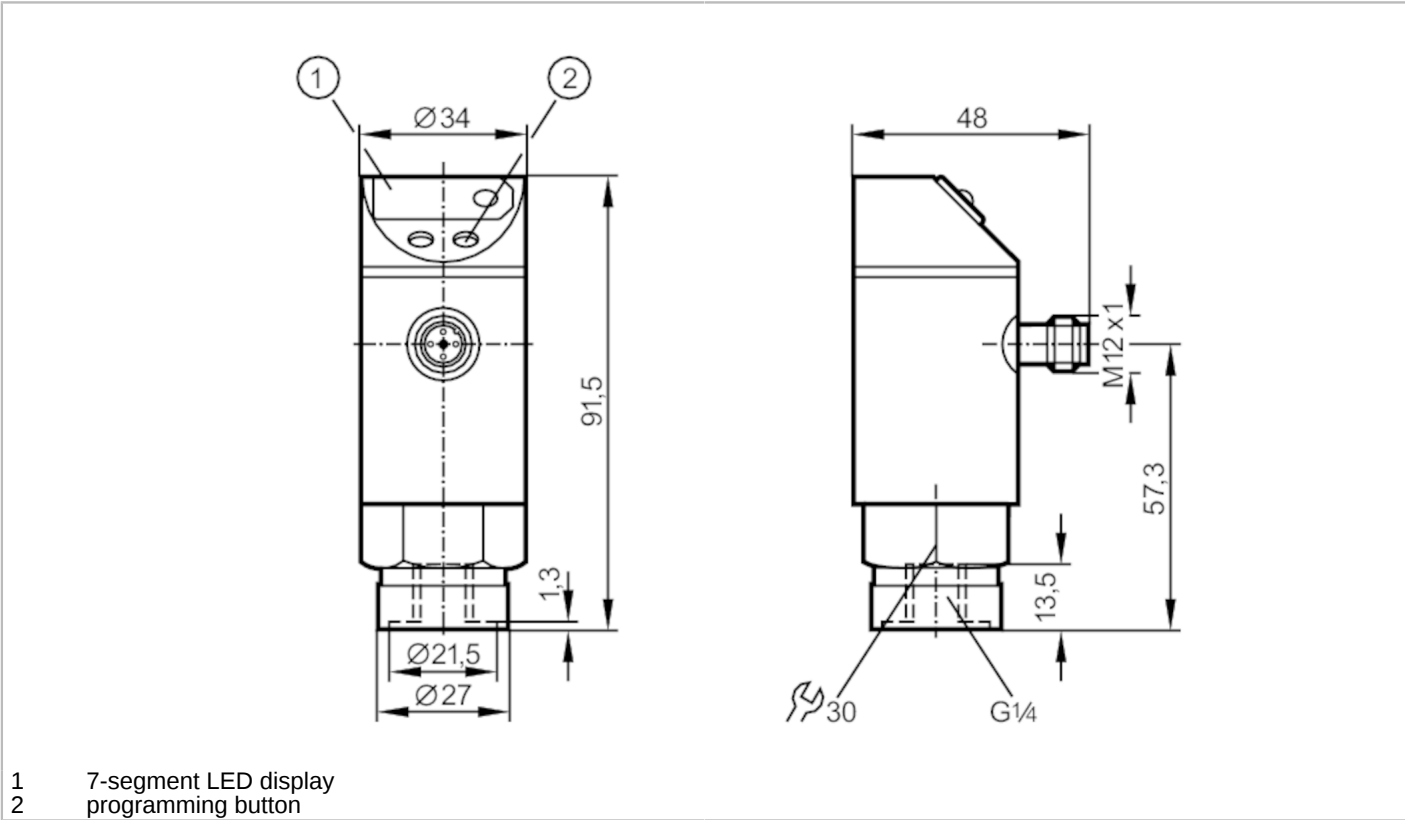


Pressure sensor with display

PN-010MRBR14-QFNKG/US/ IV

Article no longer available - archive entry

Alternative articles: PN7004
When selecting an alternative article and accessories please note that technical data may differ!



Product characteristics	
Number of inputs and outputs	Number of digital outputs: 2
Measuring range [MPa]	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 [MPa]	15
Pressure rating [Mpa]	5
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



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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: 2
Outputs		
Total number of outputs		2
Output signal		switching signal
Electrical design		NPN
Number of digital outputs		2
Output function		normally open / normally closed; (parameterisable)
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		pulsed
Overload protection		yes
Measuring/setting range		
Measuring range [MPa]		0...1
Set point SP [MPa]		0.02...1
Reset point rP [MPa]		0.01...0.99
In steps of [MPa]		0.01
Accuracy / deviations		
Switch point accuracy [X16]		$< \pm 1,0$
Repeatability [X16]		$< \pm 0,25$; (with temperature fluctuations $< 10\text{ K}$)
Temperature drift per 10 K		$< \pm 0.3$
Response times		
Switching frequency for a given set response time of one output	Response time [ms] (dAP)	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
Software / programming		
Adjustment of the switch point		programming button
Parameter setting options		hysteresis / window; normally open / normally 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		
Materials	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

