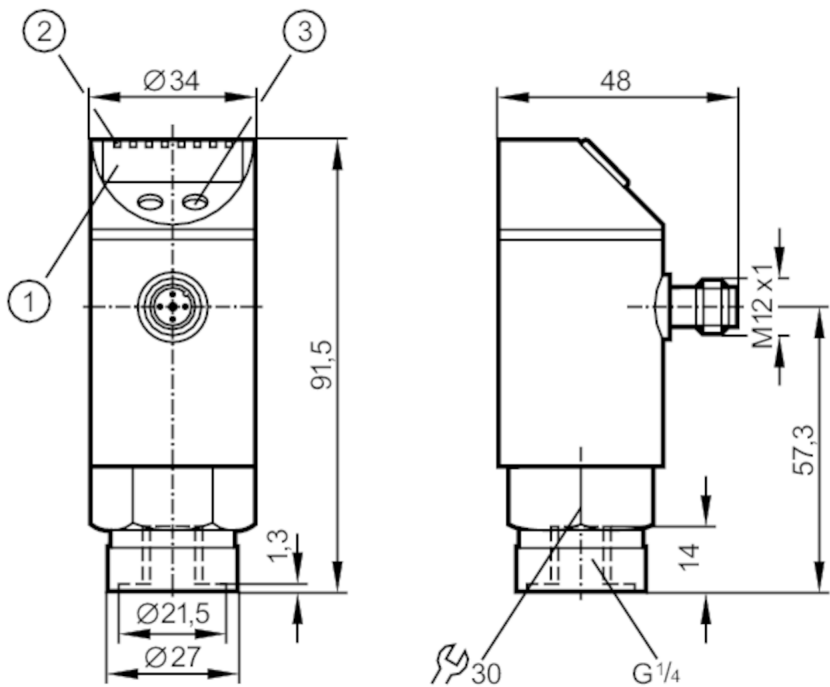


PNI024



Pressure sensor with analogue input

PNI010-RBR14-QFRKG/US/ IV



- 1 alphanumeric display 4-digit
- 2 LEDs Display unit / switching status
- 3 programming button



Application		
Media		liquids and gases
Medium temperature	[°C]	-25...80
Pressure rating	[bar]	50
Min. bursting pressure	[bar]	150
Type of pressure		relative pressure
Electrical data		
Operating voltage	[V]	18...30 DC
Current consumption	[mA]	< 90
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
Inputs / outputs		
Number of inputs and outputs		Number of digital outputs: 2



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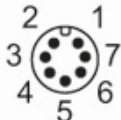
Inputs		
Analogue input (current)	[mA]	0...20
Max. load	[Ω]	300
Analogue input (voltage)	[V]	0...10
Min. load resistance	[Ω]	90000
Outputs		
Total number of outputs		2
Output signal		switching signal
Electrical design		PNP/NPN
Number of digital outputs		2
Output function		normally open / normally closed; (parameterisable)
Max. voltage drop switching output DC	[V]	2
Permanent current rating of switching output DC	[mA]	250
Switching frequency DC	[Hz]	< 170
Short-circuit protection		yes
Type of short-circuit protection		pulsed
Overload protection		yes
Measuring/setting range		
Measuring range	[bar]	0...10
Set point SP	[bar]	-2.46...10
Note on setpoint SP		differential pressure
Reset point rP	[bar]	-2.5...9.96
Note on setpoint SP		differential pressure
In steps of	[bar]	0.02
Accuracy / deviations		
Characteristics deviation [% of the final value]		< ± 0,6
Temperature drift per 10 K		< ± 0,3
Temperature drift per 10 K		< ± 0.3
Characteristics deviation analogue input		< ± 0.3
Temperature drift analogue input per 10 K		< ± 0.1
Temperature drift analogue input	[°C]	0...80
Response times		
Response time	[ms]	< 3
Delay time programmable dS, dr	[s]	0, 0,1...50
Damping for the switching output dAP	[s]	0...4

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Software / programming		
Adjustment of the switch point	programming button	
Parameter setting options	hysteresis / window; normally open / normally closed; switching logic; current/voltage input; Damping; adaptation of displayed values; display can be rotated and switched off; Display unit	
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)
MTTF	[years]	152
Mechanical data		
Weight	[g]	294.4
Materials	stainless steel (1.4305 / 303); PBT; PC; PA; FKM	
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	Display unit	3 x LED, green
	display mode	3 x LED, green
	function display	alphanumeric display, 4-digit
	measured values	alphanumeric display, 4-digit
Display unit	bar; psi; MPa	
Remarks		
Pack quantity	1 pcs.	
Electrical connection		
Connector: 1 x M12; Contacts: gold-plated		
		

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Connection

