

PNI021



Pressure sensor with analogue input

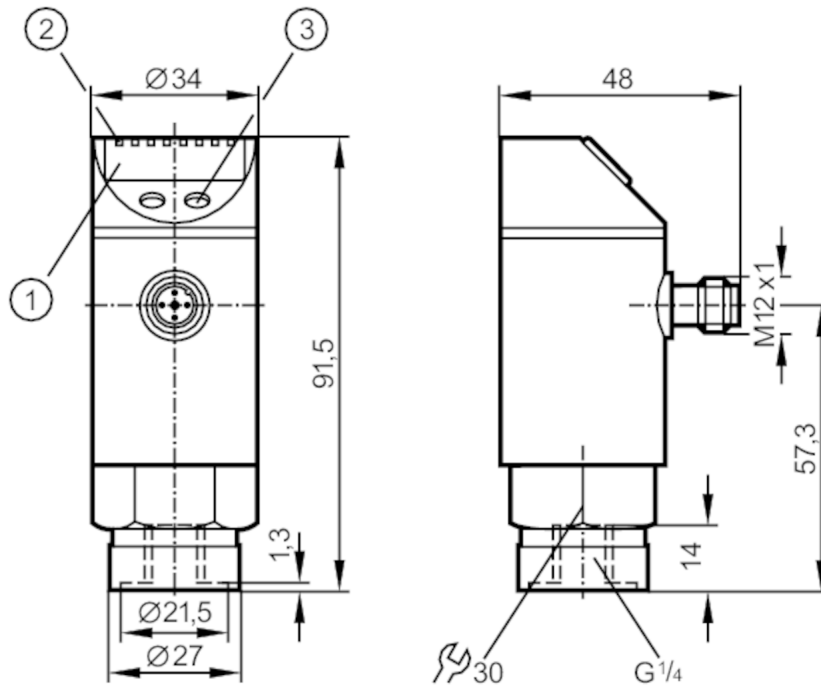
PNI250-SBR14-QFRKG/US/ V

phase-out article

Alternative articles: DP1204 + PN2091

When selecting an alternative article and accessories please note that technical data may differ!

a DP1204 and two PA3021s are required



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



Product characteristics

Number of inputs and outputs	Number of digital outputs: 2
Measuring range [bar]	0...250
Process connection	threaded connection G 1/4 internal thread

Application

Special feature	Gold-plated contacts
Application	for industrial applications
Media	liquids and gases
Conditionally suitable for	use in gases at pressures > 25 bar only on request
Medium temperature [°C]	-25...80
Min. burst pressure	850 bar 85 MPa
Pressure rating	400 bar 40 MPa
Type of pressure	relative pressure

Electrical data

Operating voltage [V]	18...30 DC
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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
Input resistance	[Ω]	300
Analogue input (voltage)	[V]	0...10
Input resistance	[kΩ]	90

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...250
Set point SP	[bar]	-62...250
Note on setpoint SP		differential pressure
Reset point rP	[bar]	-63...249
Note on reset point rP		differential pressure
In steps of	[bar]	1

Accuracy / deviations

Characteristics deviation		< ± 0,6
	[% of the final value]	
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

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Response times		
Response time	[ms]	< 3
Delay time programmable dS, dr	[s]	0, 0,1...50
Damping process value dAP	[s]	0...4
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 67
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
Pressure Equipment Directive		Sound engineering practice; can be used for group 2 fluids; group 1 fluids on request
Mechanical data		
Weight	[g]	293
Housing		cylindrical
Dimensions	[mm]	Ø 34 / L = 91.5
Materials		stainless steel (303/1.4305); PBT; PC; PA; FKM
Materials (wetted parts)		stainless steel (303/1.4305); ceramics; FKM
Min. pressure cycles		100 million
Process connection		threaded connection G 1/4 internal thread
Restrictor element integrated		no (can be retrofitted)
Displays / operating elements		
Display	Display unit	3 x LED, green
	display mode	3 x LED, green
	switching status	2 x LED, yellow
	function display	alphanumeric display, 4-digit
	measured values	alphanumeric display, 4-digit
Display unit		bar; psi; MPa
Remarks		
Pack quantity		1 pcs.

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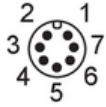


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Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection

