



Pressure sensor with display

PN-003PRBN14-KFPKG/US/ IV

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Alternative articles: PN2226

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



- 1 7-segment LED display
- 2 programming button



Product characteristics

Number of inputs and outputs	Number of digital outputs: 1; Number of analogue outputs: 1
Measuring range [psi]	0...30
Process connection	threaded connection 1/4" NPT external thread

Application

Application	for industrial applications
Media	liquids and gases
Medium temperature [°C]	-25...80
Min. bursting pressure [psi]	725
Pressure rating [psi]	290
Type of pressure	relative pressure

Electrical data

Operating voltage [V]	20...30 DC
Current consumption [mA]	< 60
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: 1; Number of analogue outputs: 1									
Outputs											
Total number of outputs		2									
Output signal		switching signal; analogue signal; (configurable)									
Electrical design		PNP									
Number of digital outputs		1									
Max. voltage drop switching output DC [V]		2									
Permanent current rating of switching output DC [mA]		250									
Number of analogue outputs		1									
Analogue current output [mA]		4...20									
Max. load [Ω]		500									
Short-circuit protection		yes									
Type of short-circuit protection		pulsed									
Overload protection		yes									
Measuring/setting range											
Measuring range [psi]		0...30									
Set point SP [psi]		0.3...30									
Reset point rP [psi]		0.1...29.8									
In steps of [psi]		0.2									
Accuracy / deviations											
Switch point accuracy [% of the final value]		< ± 1,5									
Repeatability [% of the final value]		< ± 0,25; (with temperature fluctuations < 10 K)									
Characteristics deviation [% of the final value]		< ± 1,0									
Temperature drift per 10 K		< ± 0.3									
Response 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; switch point (SPx) = 70 %; reset point (rPx) = 30 %									
Delay time programmable dS, dr [s]		0, 0,2,...10, 11,...50									
Max. response time analogue output [ms]		3									
Software / programming											
Adjustment of the switch point		programming button									
Operating conditions											
Ambient temperature [°C]		-25...80									

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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

Materials	EPDM/X; FKM; NBR; PBT; PC; PTFE; stainless steel (304/1.4301)
Materials (wetted parts)	FKM; ceramics; stainless steel (303/1.4305)
Min. pressure cycles	100 million
Process connection	threaded connection 1/4" NPT external thread

Displays / operating elements

Display	switching status	LED, red
	function display	7-segment LED display
	measured values	7-segment LED display

Remarks

Pack quantity	1 pcs.
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Electrical connection

Connector: 1 x M12; coding: A



Connection

