

PE3021



Pressure sensor with display

PE-250-SBR14-KFPKG/US/ /E

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Alternative articles: PE3001

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 analog outputs: 1
Measuring range [bar]	0...250
Process connection	threaded connection G 1/4 Internal thread

Application

System	gold-plated contacts
Application	for industrial applications
Media	liquids and gases
Conditionally suitable for	For gaseous media the application is limited to max. 25 bar.
Cannot be used for	oils
Medium temperature [°C]	-25...80
Min. bursting pressure [bar]	850
Pressure rating [bar]	400
Type of pressure	relative pressure

Electrical data

Operating voltage [V]	20...30 DC
Current consumption [mA]	< 60



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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: 1; Number of analog outputs: 1
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Outputs

Total number of outputs	2
Output signal	switching signal; analog 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 analog outputs	1
Analog current output [mA]	4...20
Max. load [Ω]	500
Short-circuit protection	yes
Type of short-circuit protection	yes (non-latching)
Overload protection	yes

Measuring/setting range

Measuring range [bar]	0...250
Set point SP [bar]	2...250
Reset point rP [bar]	1...248
In steps of [bar]	1

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

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									
Max. response time analog output [ms]	3									

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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 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)
Mechanical data		
Material	EPDM/X; FKM; PA; PBT; PC; stainless steel (1.4301 / 304)	
Materials (wetted parts)	EPDM/X; ceramics; stainless steel (1.4305 / 303)	
Min. pressure cycles	100 million	
Process connection	threaded connection G 1/4 Internal 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.	
Electrical connection		
Connector: 1 x M12; coding: A; Contacts: gold-plated		
		

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Connection

