

PE7020



Pressure sensor with display

PE-400-SBR14-QFPKG/US/ /E

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- 1 7-segment LED display
2 programming button



Product characteristics

Number of inputs and outputs	Number of digital outputs: 2
Measuring range [bar]	0...400
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	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]	1000
Pressure rating [bar]	600
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
Reverse polarity protection	yes



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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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Outputs

Total number of outputs	2
Output signal	switching signal
Electrical design	PNP
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	[bar] 0...400
Set point SP	[bar] 4...400
Reset point rP	[bar] 2...398
In steps of	[bar] 2

Accuracy / deviations

Switch point accuracy	[% of the final value] < ± 1,0
Repeatability	[% of the final value] < ± 0,25; (with temperature fluctuations < 10 K)
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									

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 67



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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; stainless steel (304/1.4301)	
Materials (wetted parts)	EPDM/X; ceramics; stainless steel (303/1.4305)	
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

