



Pressure sensor with display

PN-002HRBN14-QFPKG/US/ IV

Article no longer available - archive entry

Alternative articles: PN7209

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: 2
Measuring range [inHg]	-30...20
Process connection	threaded connection 1/4" NPT external thread

Application

Special feature	Gold-plated contacts
Application	for industrial applications
Media	liquids and gases
Medium temperature [°C]	-25...80
Min. bursting pressure [inHg]	1500
Pressure rating [inHg]	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



Pressure sensor with display

PN-002HRBN14-QFPKG/US/ IV

Power-on delay time	[s]	0.2
Integrated watchdog		yes

Inputs / outputs

Number of inputs and outputs	Number of digital outputs: 2
------------------------------	------------------------------

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	[inHg]	-30...20
Set point SP	[inHg]	-29...20
Reset point rP	[inHg]	-29.5...19.5
In steps of	[inHg]	0.5

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 65

PN7229



Pressure sensor with display

PN-002HRBN14-QFPKG/US/ IV

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

