

PN7203



Pressure sensor with display

PN-025-RBN14-QFRKG/US/ IV

phase-out article

Alternative articles: PN7293

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



- 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	0...25 bar	0...363 psi	0...2.5 MPa
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	350 bar	5075 psi	35 MPa
Pressure rating	150 bar	2175 psi	15 MPa
Type of pressure	relative pressure		

Electrical data

Operating voltage [V]	18...36 DC; (to SELV/PELV)
Current consumption [mA]	< 50
Min. insulation resistance [MΩ]	100; (500 V DC)
Protection class	III



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Reverse polarity protection	yes		
Overvoltage protection	yes; (< 40 V)		
Power-on delay time [s]	0.3		
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; IO-Link; (configurable)		
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		
Measuring/setting range			
Measuring range	0...25 bar	0...363 psi	0...2.5 MPa
Set point SP	0.2...25 bar	4...362 psi	0.02...2.5 MPa
Reset point rP	0.1...24.9 bar	2...360 psi	0.01...2.49 MPa
In steps of	0.1 bar	2 psi	0.01 MPa
Factory setting		SP1 = 90 psi	rP1 = 84 psi
		SP2 = 272 psi	rP2 = 264 psi
Accuracy / deviations			
Switch point accuracy [X21]	< ± 0,5		
Repeatability [X21]	< ± 0,1; (with temperature fluctuations < 10 K)		
Characteristics deviation [X21]	< ± 0,25 (BFSL) / < ± 0,5 (LS); (BFSL = Best Fit Straight Line; LS = limit value setting)		
Hysteresis deviation [X21]	< ± 0,25		
Long-term stability [X21]	< ± 0,05; (per 6 months)		
Temperature coefficient zero point [X22]	0,2; (-20...80 °C)		
Temperature coefficient span [X22]	0,2; (-20...80 °C)		
Response times			
Delay time programmable dS, dr [s]	0; 0,2...50		
Software / programming			
Parameter setting options	hysteresis / window; normally open / normally closed; diagnostic function; switching logic; switch-on/switch-off delay; Damping; Display unit		
Interfaces			
Communication interface	IO-Link		
Transmission type	COM2 (38,4 kBaud)		
IO-Link revision	1.1		

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Profiles	no profile	
SIO mode	yes	
Required master port type	A	
Process data analogue	1	
Process data binary	2	
Min. process cycle time [ms]	2.3	
Supported DeviceIDs	Type of operation	DeviceID
	default	329

Operating conditions		
Ambient temperature [°C]	-20...80	
Storage temperature [°C]	-40...100	
Protection	IP 65	

Tests / approvals		
EMC	EN 61000-6-2	
	EN 61000-6-3	
Shock resistance	DIN EN 60068-2-27	50 g (11 ms)
Vibration resistance	DIN EN 60068-2-6	20 g (10...2000 Hz)
MTTF [ANN]	219	

Mechanical data		
Weight [g]	265.8	
Materials	stainless steel (1.4301 / 304); stainless steel (1.4404 / 316L); PC; PBT; PEI; FKM; PTFE	
Materials (wetted parts)	stainless steel (1.4305 / 303); ceramics; FKM	
Min. pressure cycles	100 million	
Process connection	threaded connection 1/4" NPT external thread	
Restrictor element integrated	no (can be retrofitted)	

Displays / operating elements		
Display	Display unit	3 x LED, green
	switching status	2 x LED, yellow
	function display	alphanumeric display, 4-digit
	measured values	alphanumeric display, 4-digit

Remarks		
Pack quantity	1 pcs.	

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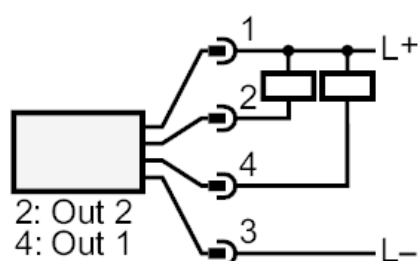
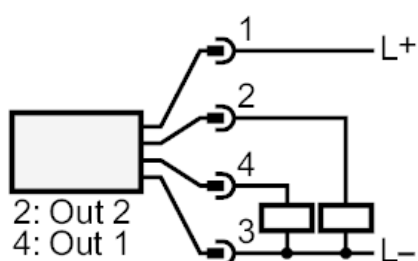


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Electrical connection

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



OUT1	switching output IO-Link
OUT2	switching output Diagnostic output