



Pressure sensor with display

PI-150-REA01-MFRKG/US/ IP

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Alternative articles: PL1512
When selecting an alternative article and accessories please note that technical data may differ!



- 1 alphanumeric display 4-digit
- 2 status LEDs
- 3 programming button



Product characteristics	
Number of inputs and outputs	Number of digital outputs: 1; Number of analogue outputs: 1
Measuring range [bar]	-1...150
Process connection	threaded connection G 1 external thread sealing cone
Application	
Special feature	Gold-plated contacts
Installation	freely rotatable housing 350°
Media	liquids and gases
Conditionally suitable for	use in gases at pressures > 25 bar only on request
Medium temperature [°C]	-25...125; (145 max. 1h)
Min. bursting pressure [bar]	650
Pressure rating [bar]	200
Type of pressure	relative pressure; vacuum



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No dead space	yes
Electrical data	
Operating voltage [V]	18...32 DC
Current consumption [mA]	< 50
Min. insulation resistance [MΩ]	100; (500 V DC)
Protection class	III
Reverse polarity protection	yes
Power-on delay time [s]	0.5
Integrated watchdog	yes
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/NPN
Number of digital outputs	1
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]	6
Number of analogue outputs	1
Analogue current output [mA]	4...20, invertible; (scalable 1:4)
Max. load [Ω]	(U _b - 10 V) / 20 mA
Analogue voltage output [V]	0...10, invertible; (scalable 1:4)
Min. load resistance [Ω]	2000
Short-circuit protection	yes
Type of short-circuit protection	pulsed
Overload protection	yes
Measuring/setting range	
Measuring range [bar]	-1...150
Set point SP [bar]	-0.8...150
Reset point rP [bar]	-1...149.8
Analogue start point [bar]	-1...112.5
Analogue end point [bar]	36.5...150
In steps of [bar]	0.1
Accuracy / deviations	
Switch point accuracy [X21]	< ± 0,5; (Turn down 1:1)
Repeatability [X21]	< ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1)
Characteristics deviation [X21]	< ± 0,5; (Turn down 1:1, linearity, incl. hysteresis and repeatability, limit value setting to DIN EN IEC 62828-1)
Linearity deviation [X21]	< ± 0,15; (Turn down 1:1)



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Hysteresis deviation	[X21]	$< \pm 0,15$; (Turn down 1:1)
Long-term stability	[X21]	$< \pm 0,1$; (Turn down 1:1; per year)
Temperature coefficient zero point	[X22]	$< \pm 0,05$; (0...70 °C)
Temperature coefficient span	[X22]	$< \pm 0,15$; (0...70 °C)
Response times		
Response time	[ms]	< 100
Damping process value dAP	[s]	0.1...100
Damping for the analogue output dAA	[s]	0.1...100
Max. response time analogue output	[ms]	100
Software / programming		
Parameter setting options		hysteresis / window; normally open / normally closed; switching logic; current/voltage output; Damping; adaptation of displayed values; display can be rotated and switched off; Display unit; zero point; span
Operating conditions		
Ambient temperature	[°C]	-25...80
Storage temperature	[°C]	-40...100
Protection		IP 67; IP 69K
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 61000-4-5 Surge	0,5/1 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)
Pressure Equipment Directive		Sound engineering practice; can be used for group 2 fluids; group 1 fluids on request
Mechanical data		
Weight	[g]	450
Materials		stainless steel (1.4404 / 316L); PC; PBT; PEI; FKM; PTFE
Materials (wetted parts)		stainless steel (1.4435 / 316L); ceramics; PTFE
Min. pressure cycles		100 million
Process connection		threaded connection G 1 external thread sealing cone
Displays / operating elements		
Display	Display unit	4 x LED, green
	switching status	LED, yellow
	function display	alphanumeric display, 4-digit
	measured values	alphanumeric display, 4-digit
Display unit		bar; psi; MPa; % of the span
Remarks		
Pack quantity		1 pcs.

PY2692



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Electrical connection

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



Connection



OUT1
OUT2

switching output
analogue output