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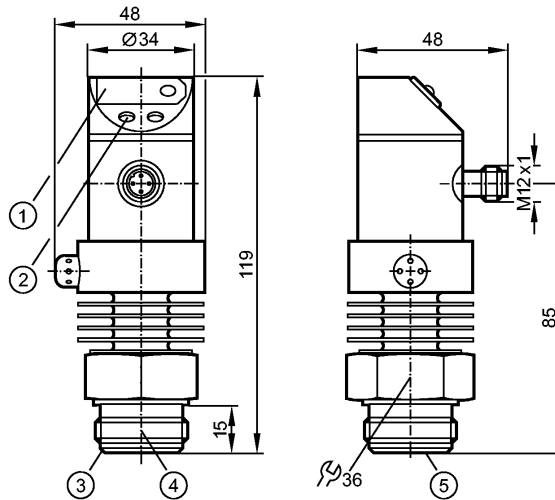
efectorsoo

PI2064



PI-010-RES30-MFRKG/US/ /P

Pressure sensors



- 1: 7-segment LED display
- 2: Programming button
- 3: Aseptoflex sealing edge
- 4: Aseptoflex thread
- 5: PTFE membrane



Product characteristics

Combined pressure sensor

Quick disconnect

no dead space

Freely rotatable housing 350°

Zero and span adjustable

Function programmable

Process connection: for Aseptoflex adapter

2 outputs

OUT1 = switching output

OUT2 = switching output or analog output

7-segment LED display

Measuring range: -0.5...10 bar / -7...145 psi / -50...1000 kPa

Application

Application

Type of pressure: relative pressure
Hygienic systems, liquids and viscous media

Pressure rating	50 bar	725 psi	5000 kPa
Bursting pressure min.	150 bar	2175 psi	15000 kPa
Medium temperature [°C]	-25...125 (145 max. 1h)		
Electrical data	DC PNP/NPN		
Electrical design	DC PNP/NPN		
Operating voltage [V]	20...30 DC ¹⁾		
Current consumption [mA]	< 60		
Insulation resistance [MΩ]	> 100 (500 V DC)		
Protection class	III		
Reverse polarity protection	yes		
Outputs			

PI2064 - Combined pressure sensor - eclass: 27201302 / 27-20-13-02

Output	2 outputs OUT1 = switching output OUT2 = switching output or analog output		
Output function	2 x normally open / closed programmable or 1 x normally open / closed programmable + 1 x analog (4...20 mA / 0...10 V; programmable 1:4)		
Current rating [mA]	2 x 250		
Voltage drop [V]	< 2		
Short-circuit protection	yes (non-latching)		
Overload protection	yes		
Switching frequency [Hz]	≤ 170		
Analog output	4...20 mA / 0...10 V		
Max. load [Ω]	4...20 mA: max. (U _b - 10 V) x 50 / 0...10 V: min. 2000		
Measuring / setting range			
Display unit	bar, psi, kPa		
Measuring range	-0.5...10 bar	-7...145 psi	-50...1000 kPa
Setting range			
Set point, SP	-0.45...9.99 bar	-7 ...145 psi	-45...999 kPa
Reset point, rP	-0.50...9.94 bar	-7 ...144 psi	-50...994 kPa
Analog start point, ASP	-0.50...7.49 bar	-7 ...109 psi	-50...749 kPa
Analog end point, AEP	2.00...9.99 bar	29 ...145 psi	200...999 kPa
in steps of	0.01 bar	1 psi	1 kPa
Accuracy / deviations			
Accuracy / deviations (in % of the span) Turn down 1:1			
Characteristics deviation *)	< ± 0.6		
Linearity	< ± 0.5		
Hysteresis	< ± 0.1		
Repeatability **)	< ± 0.1		
Long-term stability ***)	< ± 0.1		
Temperature coefficients (TEMPCO) in the temperature range 0...80° C (in % of the span per 10 K)			
Greatest TEMPCO of the zero point	< ± 0.15		
Greatest TEMPCO of the span	< ± 0.4		
Reaction times			
Power-on delay time [s]	0.2		
Min. response time switching output [ms]	3		
Damping for the switching output (dAP) [s]	0..4		
Damping for the analog output (dAA) [s]	0 - 0.1 - 0.5 - 2		
Response time analog output [ms]	3		
Integrated watchdog	yes		
Software / programming			
Programming options	hysteresis / window function; N.O. / N.C; output polarity; current / voltage outputs; damping; calibration of displayed values; display can be rotated / deactivated; display unit		
Environment			
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			
Process connection	for Aseptoflex adapter		

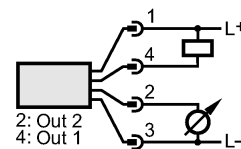
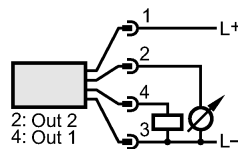
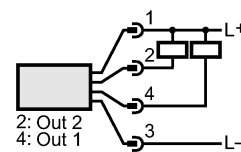
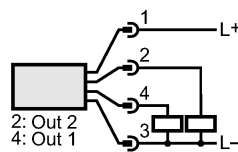
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Materials (wetted parts)	stainless steel 316L / 1.4435; PTFE on ceramic substrate; PTFE
Housing materials	stainless steel 316L / 1.4404; PBT (Pocan); PC (Makrolon); PA; EPDM/X (Santoprene); FPM (Viton)
Switching cycles min.	100 million
Weight [kg]	0.45
Displays / operating elements	
Display	Switching status 2 x LED red Function display 7-segment LED display Measured values 7-segment LED display
Electrical connection	
Connection	M12 connector; gold-plated contacts

Wiring

Programming of the output function (OUT1 / OUT2):

Hno = hysteresis / normally open
Hnc = hysteresis / normally closed
Fno = window function / normally open
Fnc = window function / normally closed
Complementary outputs:
output 1: = Hno, output 2: = Hnc
(with the same SP / rP)



Programming of the analog output (OUT2):

I = current output (4...20 mA)
U = voltage output (0...10 V)



Remarks

- 1) cULus - Class 2 source required
- *) linearity, incl. hysteresis and repeatability;
(limit value setting to DIN 16086)
- ***) with temperature fluctuations < 10 K
- ***) in % of the span per year

Pack quantity [piece]	1
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