



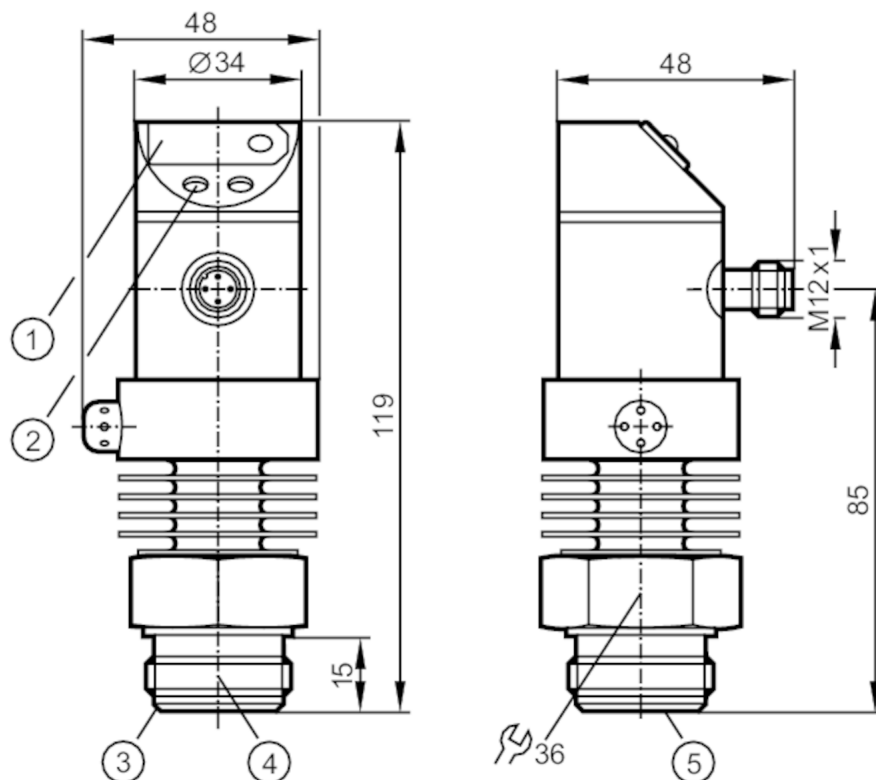
Flush pressure sensor with display

PI-2,5-RES30-MFRKG/US/ /P

Article no longer available - archive entry

Alternative articles: PI2096 or PI1096

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



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



Product characteristics

Number of inputs and outputs	Number of digital outputs: 2; Number of analogue outputs: 1		
Measuring range	-0.13...2.5 bar	-1.8...36.3 psi	-13...250 kPa
Process connection	threaded connection Aseptoflex external thread Aseptoflex		

Application

Special feature	Gold-plated contacts		
Application	flush mountable for the food and beverage industry		
Installation	freely rotatable housing 350°		
Media	liquid and viscous media		
Medium temperature [°C]	-25...125; (145 max. 1h)		
Min. bursting pressure	50 bar	725 psi	5000 kPa
Pressure rating	20 bar	290 psi	2000 kPa
Type of pressure	relative pressure		
No dead space	yes		



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Electrical data				
Operating voltage	[V]	20...30 DC; ("supply class 2" to cULus)		
Current consumption	[mA]	< 60		
Min. insulation resistance	[MΩ]	100; (500 V DC)		
Protection class		III		
Reverse polarity protection		yes		
Power-on delay time	[s]	0.2		
Integrated watchdog		yes		
Inputs / outputs				
Number of inputs and outputs		Number of digital outputs: 2; 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		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		
Number of analogue outputs		1		
Analogue current output	[mA]	4...20; (scalable 1:4)		
Max. load	[Ω]	(Ub - 10 V) / 20 mA		
Analogue voltage output	[V]	0...10; (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		-0.13...2.5 bar	-1.8...36.3 psi	-13...250 kPa
Set point SP		-0.11...2.5 bar	-1.6...36.3 psi	-11...250 kPa
Reset point rP		-0.12...2.49 bar	-1.7...36.2 psi	-12...249 kPa
Analogue start point		-0.13...1.88 bar	-1.8...27.2 psi	-13...188 kPa
Analogue end point		0.5...2.5 bar	7.3...36.3 psi	50...250 kPa
In steps of		0.01 bar	0.1 psi	1 kPa
Accuracy / deviations				
Repeatability	[% of the span]	< ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1)		
Characteristics deviation	[% of the span]	< ± 0,6; (Turn down 1:1 , linearity, incl. hysteresis and repeatability , limit value setting to DIN EN IEC 62828-1)		
Linearity deviation	[% of the span]	< ± 0,5; (Turn down 1:1)		
Hysteresis deviation	[% of the span]	< ± 0,1; (Turn down 1:1)		
Long-term stability		< ± 0,1; (Turn down 1:1; per year)		



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[% of the span]		
Temperature coefficient zero point		< ± 0,15; (0...80 °C)
[% of the span / 10 K]		
Temperature coefficient span		< ± 0,4; (0...80 °C)
[% of the span / 10 K]		
Response times		
Response time	[ms]	< 3
Damping process value dAP	[s]	0...4
Damping for the analogue output dAA in steps	[s]	0 - 0,1 - 0,5 - 2
Max. response time analogue output	[ms]	3
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
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	stainless steel (316L/1.4404); PBT; PC; PA; EPDM/X; FKM	
Materials (wetted parts)	stainless steel (316L/1.4435); PTFE on ceramic substrate; PTFE	
Min. pressure cycles	100 million	
Process connection	threaded connection Aseptoflex external thread Aseptoflex	
Displays / operating elements		
Display	switching status	2 x LED, red
	function display	7-segment LED display
	measured values	7-segment LED display
Display unit	bar; psi; kPa	
Remarks		
Pack quantity	1 pcs.	



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Electrical connection

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



Connection



OUT1
OUT2

switching output
switching output
analogue output