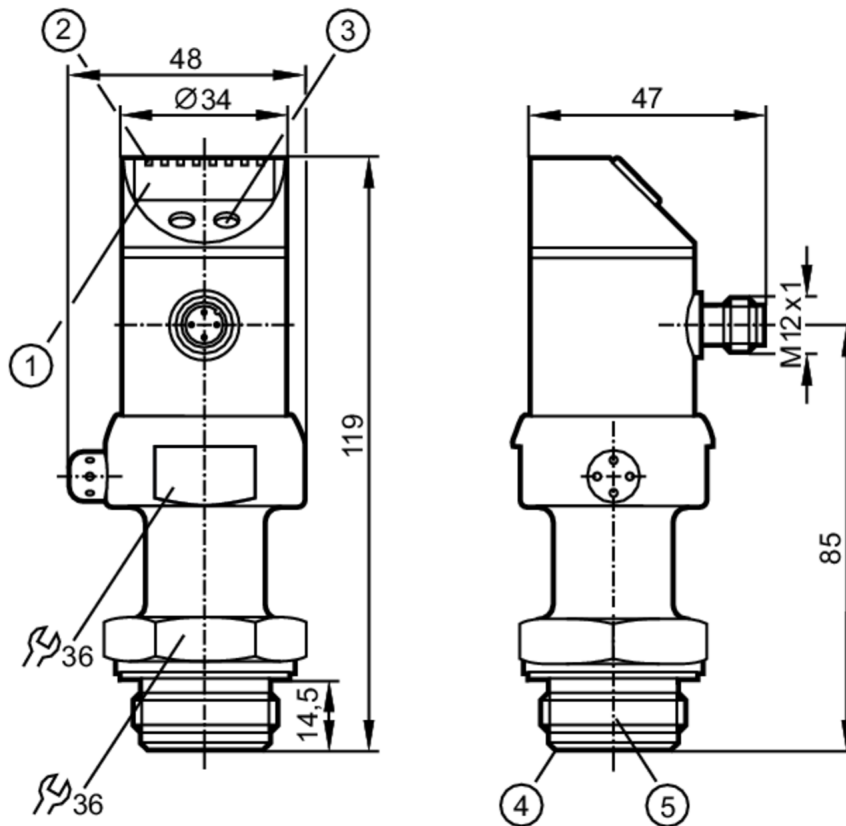


PI7096



Flush pressure sensor with display

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



- 1 alphanumeric display 4-digit
- 2 status LEDs
- 3 programming button
- 4 Aseptoflex sealing edge
- 5 Aseptoflex thread



Product characteristics

Output signal	switching signal	
Measuring range	-0.124...2.5 bar	-124...2500 mbar
Process connection	threaded connection Aseptoflex external thread Aseptoflex	

Application

Special feature	Gold-plated contacts	
Application	food and beverage industry	
Installation	freely rotatable housing 350°	
Media	viscous media and liquids with suspended particles; liquids and gases	
Medium temperature [°C]	-25...125; (145 max. 1h)	
Pressure rating [bar]	20	
Min. bursting pressure [bar]	50	
Type of pressure	relative pressure	
No dead space	yes	



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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: 2	
Outputs			
Total number of outputs		2	
Output signal		switching signal	
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]	85	
Short-circuit protection		yes	
Type of short-circuit protection		pulsed	
Overload protection		yes	
Measuring/setting range			
Measuring range		-0.124...2.5 bar	-124...2500 mbar
Set point SP	[bar]	-0.12...2.5	
Reset point rP	[bar]	-0.124...2.496	
In steps of	[bar]	0.002	
Factory setting		SP1 = 0.624 bar	rP1 = 0.574 bar
		SP2 = 1.874 bar	rP2 = 1.824 bar
Accuracy / deviations			
Switch point accuracy	[% of the span]	< ± 0,2; (Turn down 1:1)	
Repeatability	[% of the span]	< ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1)	
Characteristics deviation	[% of the span]	< ± 0,2; (Turn down 1:1 linearity, incl. hysteresis and repeatability limit value setting to DIN 16086)	
Linearity deviation	[% of the span]	< ± 0,15; (Turn down 1:1)	
Hysteresis deviation	[% of the span]	< ± 0,15; (Turn down 1:1)	
Long-term stability	[% of the span]	< ± 0,1; (Turn down 1:1; per year)	
Temperature coefficient zero point		< ± 0,05; (0...70 °C)	

PI7096



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[% of the span / 10 K]	
Temperature coefficient span [% of the span / 10 K]	< ± 0,15; (0...70 °C)

Response times

Response time [ms]	< 6
Damping for the switching output dAP [s]	0...100

Software / programming

Parameter setting options	hysteresis / window; normally open / normally closed; switching logic; Damping; adaptation of displayed values; display can be rotated and switched off; Display unit; zero point; span
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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)
MTTF [years]		178

Mechanical data

Weight [g]	405.5
Materials	stainless steel (1.4404 / 316L); PC; PBT; PEI; FKM; PTFE
Materials (wetted parts)	ceramics (99.9 % Al ₂ O ₃); PTFE; stainless steel (1.4435 / 316L); surface characteristics: Ra < 0,4 / Rz 4
Min. pressure cycles	100 million
Process connection	threaded connection Aseptoflex external thread Aseptoflex

Displays / operating elements

Display	Display unit	6 x LED, green
	switching status	2 x LED, yellow
	measured values	alphanumeric display, 4-digit
	parameter setting	alphanumeric display, 4-digit
Display unit	bar; kPa; psi; inH ₂ O; mWS; % of the span	

Remarks

Remarks	The 3-A qualification is only valid if adapters with 3-A qualification are used for installation.
Pack quantity	1 pcs.

Electrical connection

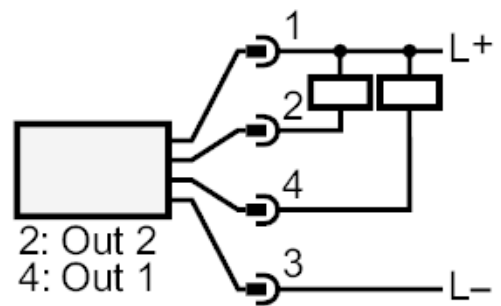
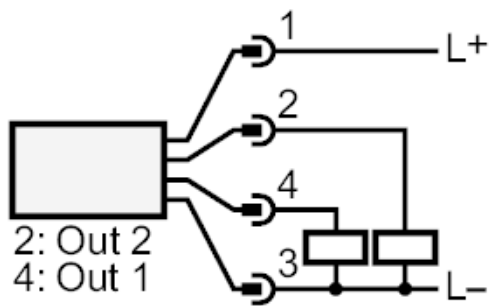
Connector: 1 x M12; Contacts: gold-plated

PI7096



Flush pressure sensor with display

PI-2,5-RES30-QFRKG/US/ IP



OUT1	switching output
	Diagnostic output
OUT2	switching output