

PI7096



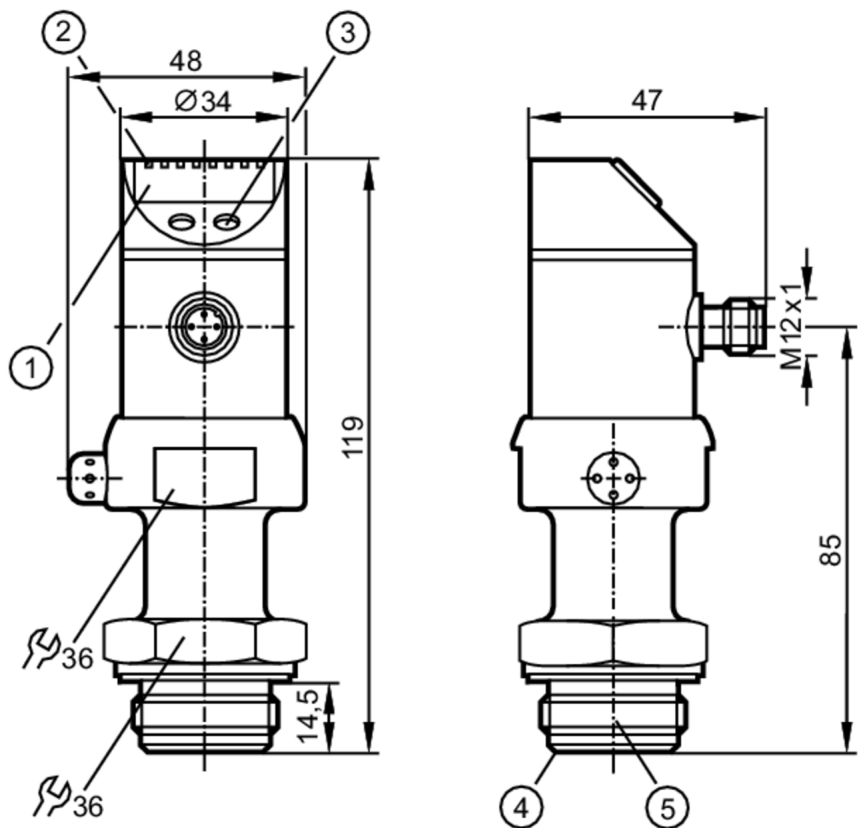
Flush pressure sensor with display

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

Article to be discontinued

Alternative articles: PI1005 or PI1706
When selecting an alternative article and accessories please note that technical data may differ!

Please do not use for new projects.
no more adapters available as accessories



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



Product characteristics

Number of inputs and outputs	Number of digital outputs: 2	
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	flush mountable for the 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)



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Min. burst pressure	50 bar	5 MPa
Pressure rating	20 bar	2 MPa
Type of pressure	relative pressure	
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: 2
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Outputs

Total number of outputs	2
Output signal	switching signal
Electrical design	PNP/NPN
Number of digital outputs	2
Output function	normally open / closed; (configurable)
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	yes (non-latching)
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 EN IEC 62828-1)
Linearity deviation [% of the span]	< ± 0,15; (Turn down 1:1)
Hysteresis deviation	< ± 0,15; (Turn down 1:1)



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[% of the span]		
Long-term stability	[% of the span]	< ± 0,1; (Turn down 1:1; per year)
Temperature coefficient zero point		< ± 0,05; (0...70 °C)
	[% of the span / 10 K]	
Temperature coefficient span		< ± 0,15; (0...70 °C)
	[% of the span / 10 K]	
Reaction times		
Response time	[ms]	< 6
Damping process value dAP	[s]	0...100
Software / programming		
Parameter setting options	hysteresis / window; normally open / closed; switching logic; 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)
MTTF	[years]	178
Mechanical data		
Weight	[g]	405.5
Housing		tubular
Dimensions	[mm]	Ø 34 / L = 119
Material		stainless steel (1.4404 / 316L); PC; PBT; PEI; FKM; PTFE
Materials (wetted parts)		ceramics (99.9 % Al2O3); stainless steel (1.4435 / 316L) surface characteristics: Ra < 0,4 µm / Rz = 4 µm; PTFE
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; inH2O; mWS; % of the span
Remarks		
Remarks	The 3-A qualification is only valid if adapters with 3-A qualification are used for installation.	
Notes	Please do not use for new projects.; no more adapters available as accessories	
Pack quantity	1 pcs.	

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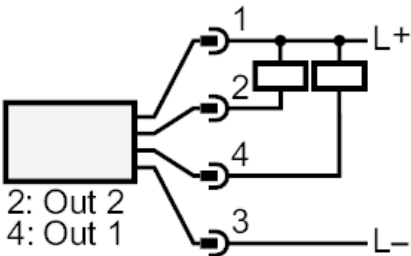
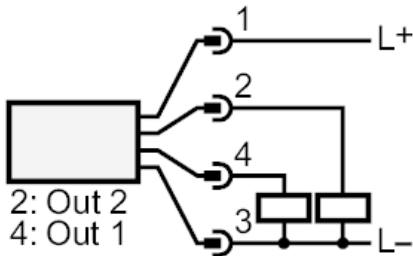


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Electrical connection

Connector: 1 x M12; coding: A; Contacts: 4, gold-plated



OUT1	Switching output Diagnostic output
OUT2	Switching output