

PI7094



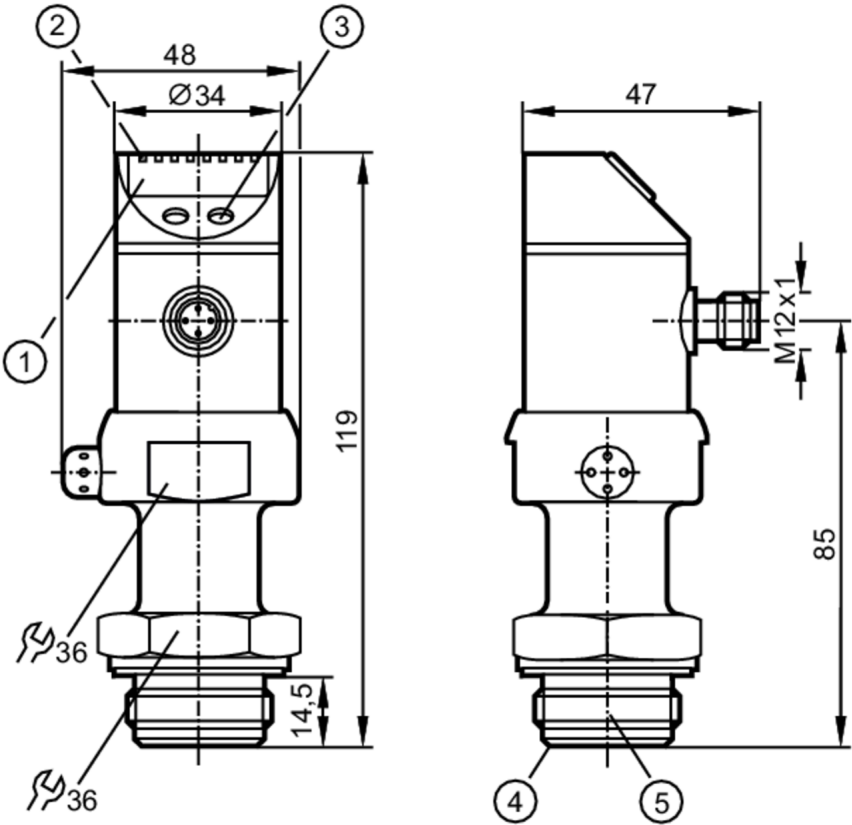
Flush pressure sensor with display

PI-010-RES30-QFRKG/US/ /P

phase-out article
Discontinuation date: 03/31/2024

Alternative articles: PI1004 or PI1704
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	-1...10 bar	-14.5...145 psi	-100...1000 kPa	-0.1...1 MPa
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



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Medium temperature	[°C]	-25...125; (145 max. 1h)		
Min. bursting pressure		150 bar	2175 psi	15 MPa
Pressure rating		50 bar	725 psi	5 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

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	-1...10 bar	-14.5...145 psi	-100...1000 kPa	-0.1...1 MPa
Set point SP	-0.98...10 bar	-14.2...145 psi	-0.098...1 MPa	
Reset point rP	-1...9.98 bar	-14.5...144.7 psi	-0.1...0.998 MPa	
In steps of	0.01 bar	0.1 psi	0.001 MPa	
Factory setting		SP1 = 2.50 bar	rP1 = 2.30 bar	
		SP2 = 7.50 bar	rP2 = 7.30 bar	

Accuracy / deviations	
Switch point accuracy	[X21] < ± 0,2; (Turn down 1:1)
Repeatability	[X21] < ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1)
Characteristics deviation	[X21] < ± 0,2; (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)
Hysteresis deviation	[X21] < ± 0,15; (Turn down 1:1)
Long-term stability	[X21] < ± 0,1; (Turn down 1:1; per year)



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Temperature coefficient zero point	[X22]	< ± 0,05; (0...70 °C)	
Temperature coefficient span	[X22]	< ± 0,15; (0...70 °C)	
Response times			
Response time	[ms]	< 6	
Damping process value 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		
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	[ANN]	178	
Mechanical data			
Weight	[g]	405.5	
Materials		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 / Rz 4; PTFE	
Min. pressure cycles		100 million	
Process connection		threaded connection Aseptoflex external thread Aseptoflex	
Displays / operating elements			
Display	Display unit	4 x LED, green	
	switching status	2 x LED, yellow	
	measured values	alphanumeric display, 4-digit	
	parameter setting	alphanumeric display, 4-digit	
Display unit		bar; psi; MPa; % 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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Electrical connection

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



OUT1	switching output Diagnostic output
OUT2	switching output