

# PI7096



## Flush pressure sensor with display

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

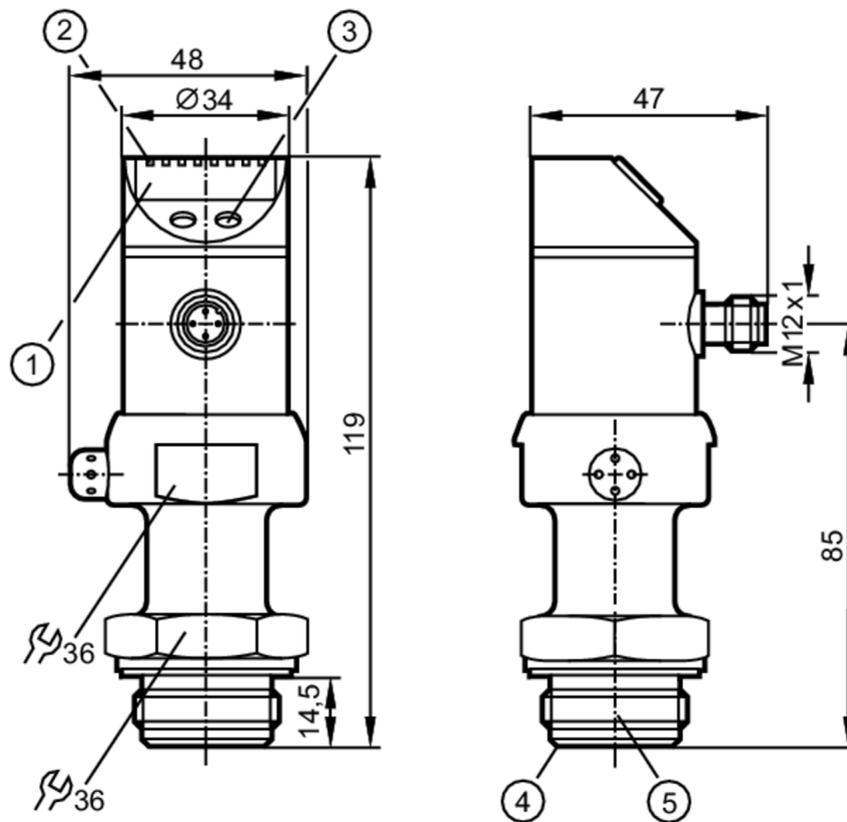
phase-out article

Discontinuation date: 03/31/2024

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



EC 1935/2004 EHEDG Tested FCM FDA UK CA

### 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

# PI7096



## Flush pressure sensor with display

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

Medium temperature	[°C]	-25...125; (145 max. 1h)
Min. bursting pressure	[bar]	50
Pressure rating	[bar]	20
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	-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)

# PI7096



## Flush pressure sensor with display

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

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 [% of the span / 10 K]	< ± 0,05; (0...70 °C)
Temperature coefficient span [% of the span / 10 K]	< ± 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 [years]		178

### Mechanical data

Weight [g]	405.5
Materials	stainless steel (316L/1.4404); PC; PBT; PEI; FKM; PTFE
Materials (wetted parts)	ceramics (99.9 % Al <sub>2</sub> O <sub>3</sub> ); PTFE; stainless steel (316L/1.4435); 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 <sub>2</sub> O; 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.

# PI7096

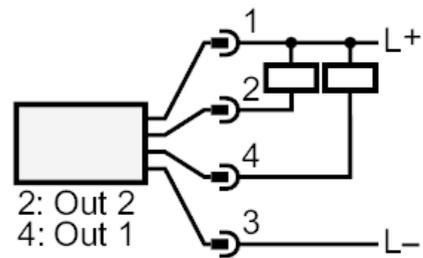
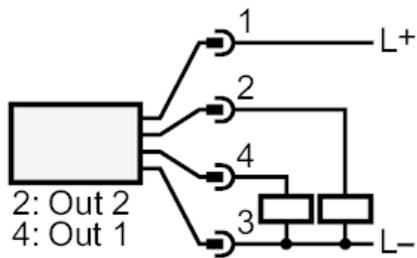


## Flush pressure sensor with display

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

### Electrical connection

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



OUT1	switching output Diagnostic output
OUT2	switching output