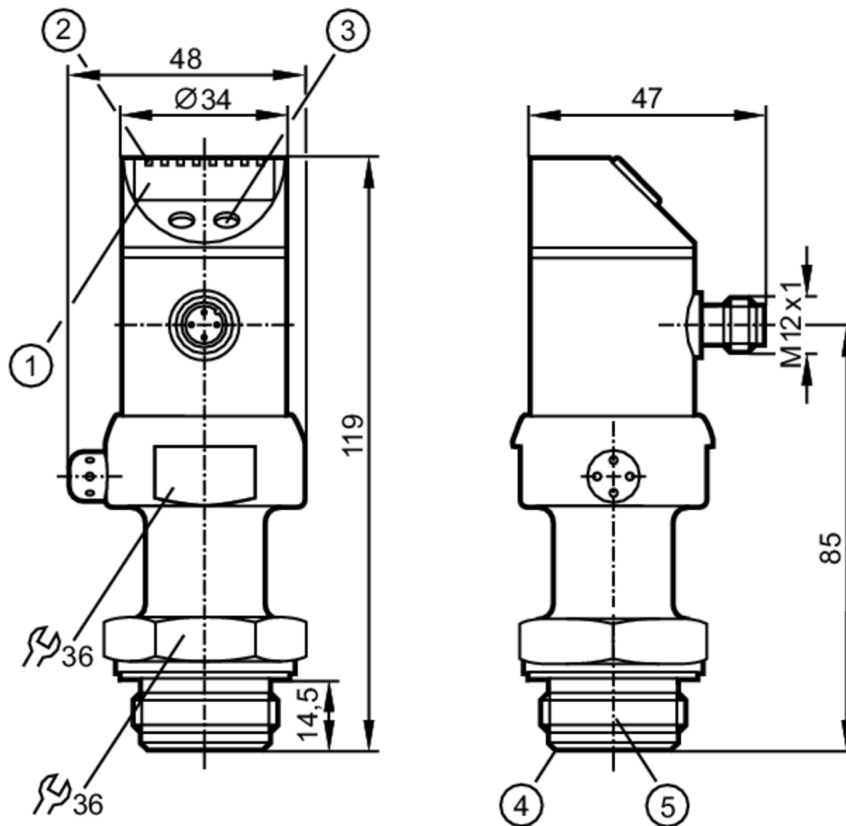


PI2098



Flush pressure sensor with display

PI-,25BRES30-MFRKG/US/ IP



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



EC 1935/2004 EHEDG Certified FCM FDA

Product characteristics

Output signal	switching signal; analog signal; (configurable)	
Measuring range	-0.0124...0.25 bar	-12.4...250 mbar
Process connection	threaded connection Aseptoflex external thread Aseptoflex	

Application

System	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 [mbar]	6000
Min. bursting pressure [mbar]	30000
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: 1; Number of analog outputs: 1
Outputs	
Total number of outputs	2
Output signal	switching signal; analog signal; (configurable)
Electrical design	PNP/NPN
Number of digital outputs	1
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]	6
Number of analog outputs	1
Analog current output [mA]	4...20, invertible; (scalable 1:4)
Max. load [Ω]	(U _b - 10 V) / 20 mA
Analog voltage output [V]	0...10, invertible; (scalable 1:4)
Min. load resistance [Ω]	2000
Short-circuit protection	yes
Type of short-circuit protection	yes (non-latching)
Overload protection	yes
Measuring/setting range	
Measuring range	-0.0124...0.25 bar -12.4...250 mbar
Set point SP [mbar]	-12...250
Reset point rP [mbar]	-12.4...249.6
Analog start point [mbar]	-12.4...187.4
Analog end point [mbar]	50...250
In steps of [mbar]	0.2
Factory setting	SP1 = 62.4 mbar rP1 = 57.40 mbar ASP = 0.0 mbar AEP = 250.0 mbar
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	< ± 0,2; (Turn down 1:1 linearity, incl. hysteresis and repeatability limit value setting to DIN 16086)



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	[% of the span]	
Linearity deviation	[% of the span]	$< \pm 0,15$; (Turn down 1:1)
Hysteresis deviation	[% of the span]	$< \pm 0,15$; (Turn down 1:1)
Long-term stability	[% of the span]	$< \pm 0,1$; (Turn down 1:1; per year)
Temperature coefficient zero point	[% of the span / 10 K]	$< \pm 0,05$; (0...70 °C)
Temperature coefficient span	[% of the span / 10 K]	$< \pm 0,15$; (0...70 °C)

Reaction times

Response time	[ms]	< 100
Damping for the switching output dAP	[s]	0.1...100
Damping for the analog output dAA	[s]	0.1...100
Step response time analogue output	[ms]	25

Software / programming

Parameter setting options	hysteresis / window; normally open / closed; switching logic; current/ voltage output; 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]	173

Mechanical data

Weight	[g]	409.5
Material		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

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Displays / operating elements		
Display	Display unit	6 x, green
	Switching status	LED, yellow
	Function display	alphanumeric display, 4-digit
	Measured values	alphanumeric display, 4-digit
Display unit	mbar; kPa; inH2O; mmWS; % of the span	

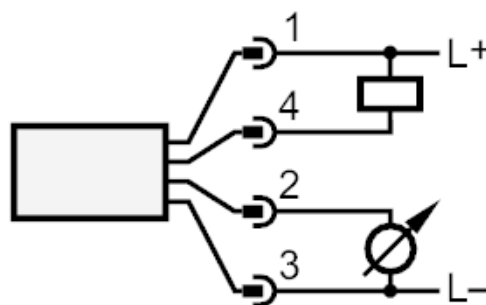
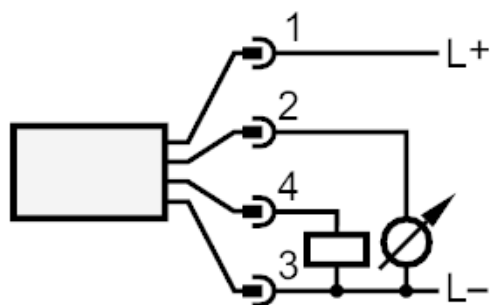
Remarks	
Remarks	The 3-A qualification is only valid if adapters with 3-A qualification are used for installation.
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; Contacts: gold-plated



Connection



- OUT1 Switching output
- OUT2 analog output