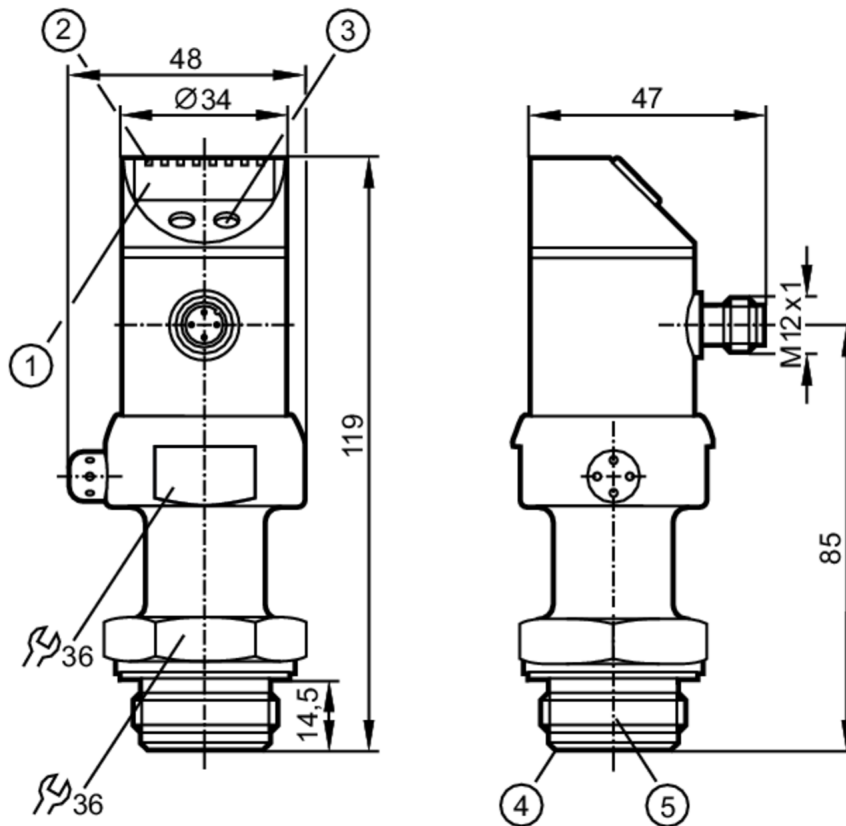


PI2098



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 FDA

Application

Application	hygienic systems
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

PI2098



Flush pressure sensor with display

PI-,25BRES30-MFRKG/US/ IP

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 analogue outputs: 1
Outputs		
Total number of outputs		2
Output signal		switching signal; analogue signal; (configurable)
Electrical design		PNP/NPN
Number of digital outputs		1
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]	6
Number of analogue outputs		1
Analogue current output	[mA]	4...20, invertible; (scalable 1:4)
Max. load	[Ω]	(U _b - 10 V) / 20 mA
Analogue voltage output	[V]	0...10, invertible; (scalable 1:4)
Min. load resistance	[Ω]	2000
Short-circuit protection		yes
Type of short-circuit protection		pulsed
Overload protection		yes
Measuring/setting range		
Measuring range	[mbar]	-12.4...250
Set point SP	[mbar]	-12...250
Reset point rP	[mbar]	-12.4...249.6
Analogue start point	[mbar]	-12.4...187.4
Analogue 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		< ± 0,2; (Turn down 1:1)
	[% of the span]	
Repeatability		< ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1)
	[% of the span]	
Characteristics deviation		< ± 0,2; (Turn down 1:1 linearity, incl. hysteresis and repeatability limit value setting to DIN 16086)



Flush pressure sensor with display

PI-,25BRES30-MFRKG/US/ IP

	[% 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)

Response times

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

Software / programming

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

Mechanical data

Weight	[g]	406
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

PI2098



Flush pressure sensor with display

PI-,25BRES30-MFRKG/US/ IP

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	

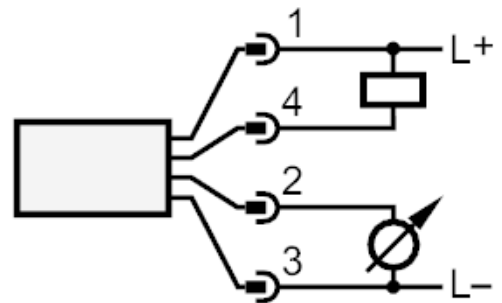
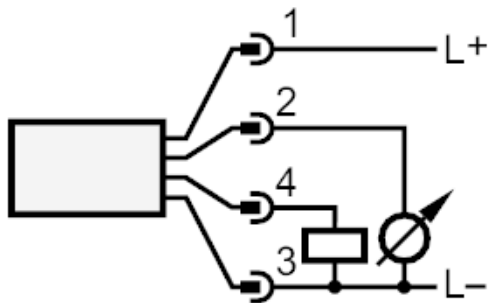
Remarks	
Remarks	The 3-A qualification is only valid if adapters with 3-A qualification are used for installation.
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; Contacts: gold-plated



Connection



OUT1 switching output
 OUT2 analogue output