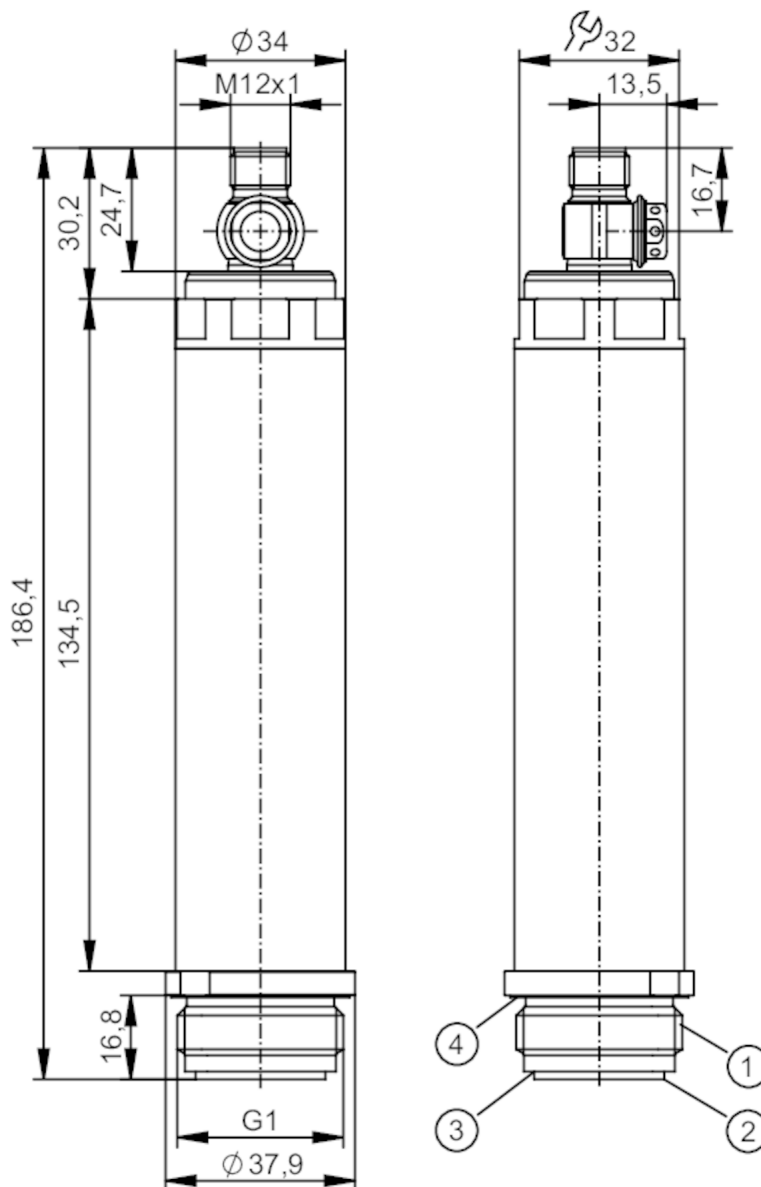




Flush pressure sensor

PM-2,5-REA01-E-ZVG/US



- 1 external thread G1 (Aseptoflex Vario)
- 2 area for metal sealing (Aseptoflex Vario)
- 3 groove for sealing ring (Aseptoflex Vario)
- 4 groove for sealing ring (DIN EN ISO 1179-2)



EC 1935/2004



Product characteristics

Number of inputs and outputs	Number of analogue outputs: 1		
Measuring range	-125...2500 mbar	-1.82...36.26 psi	-12.5...250 kPa
Process connection	threaded connection G 1 external thread Aseptoflex Vario		

Application

Special feature	Gold-plated contacts
Measuring element	ceramic-capacitive pressure measuring cell
Application	flush mountable for the food and beverage industry
Media	viscous media and liquids with suspended particles; liquids and gases
Medium temperature [°C]	-25...85; (125: < 1 h)



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Min. bursting pressure	50000 mbar	725 psi	5000 kPa
Pressure rating	20000 mbar	290 psi	2000 kPa
Vacuum resistance [mbar]	-1000		
Type of pressure	relative pressure		
No dead space	yes		
MAWP (for applications according to CRN) [bar]	20		

Electrical data			
Operating voltage [V]	18...30 DC		
Min. insulation resistance [MΩ]	100; (500 V DC)		
Protection class	III		
Reverse polarity protection	yes		
Integrated watchdog	yes		

2-wire		
Current consumption	[mA]	3.5...21.5
Power-on delay time	[s]	1
3-wire		
Current consumption	[mA]	< 45
Power-on delay time	[s]	0.5

Inputs / outputs	
Number of inputs and outputs	Number of analogue outputs: 1

Outputs	
Total number of outputs	1
Output signal	analogue signal; (configurable)
Number of analogue outputs	1
Analogue current output [mA]	4...20; (scalable)
Max. load [Ω]	700; (U _b = 24 V; (U _b - 9 V) / 21.5 mA)
Short-circuit proof	yes
Overload protection	yes

Measuring/setting range			
Measuring range	-125...2500 mbar	-1.82...36.26 psi	-12.5...250 kPa
Analogue start point	-125...2000 mbar	-1.82...29 psi	-12.5...200 kPa
Analogue end point	375...2500 mbar	5.44...36.26 psi	-37.5...250 kPa
In steps of	1 mbar	0.02 psi	0.1 kPa
Factory setting	ASP = 0.0 mbar	AEP = 2500 mbar	

Accuracy / deviations	
Repeatability [% of the span]	< ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1)
Characteristics deviation [% of the span]	< ± 0,2; (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 [% of the span]	< ± 0,15; (Turn down 1:1)
Long-term stability [% of the span]	< ± 0,1; (Turn down 1:1; per year)



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Total deviation over temperature range	Temperature range	total deviation
	-25...15 °C	Characteristics deviation $\pm 0,05$ % of the span / 10 K
	15...80 °C	Characteristics deviation
	80...125 °C	Characteristics deviation $\pm 0,1$ % of the span / 10 K
Notes on the accuracy / deviation	for further details see section Diagrams and graphs	

Response times

Damping for the analogue output dAA	[s]	0...4
2-wire		
Step response time analogue output	[ms]	30
3-wire		
Step response time analogue output	[ms]	7

Interfaces

Communication interface	IO-Link	
Transmission type	COM2 (38,4 kBaud)	
IO-Link revision	1.1	
Profiles	Digital Measuring Sensor (0x000A), Identification and Diagnosis (0x4000)	
SIO mode	no	
Required master port type	A	
Process data analogue	3	
Min. process cycle time	[ms]	3.2
Supported DeviceIDs	Type of operation	DeviceID
	default	1111

Operating conditions

Ambient temperature	[°C]	-25...80
Storage temperature	[°C]	-40...100
Protection	IP 67; IP 68; IP 69K	

Tests / approvals

EMC	DIN EN 61000-6-2	
	DIN EN 61000-6-3	
Shock resistance	DIN EN 60068-2-27	50 g (11 ms)
Vibration resistance	DIN EN 60068-2-6	20 g (10...2000 Hz)
MTTF	[years]	323
UL approval	UL Approval no.	J025

Mechanical data

Weight	[g]	554.7
Materials	stainless steel (316L/1.4404); stainless steel (304/1.4301); PBT	
Materials (wetted parts)	ceramics (99.9 % Al ₂ O ₃); stainless steel (316L/1.4435); surface characteristics: Ra 0,4 / Rz 4; PTFE	
Min. pressure cycles	100 million	
Tightening torque	[Nm]	35
Process connection	threaded connection G 1 external thread Aseptoflex Vario	

PY2006



Flush pressure sensor

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Remarks

Pack quantity

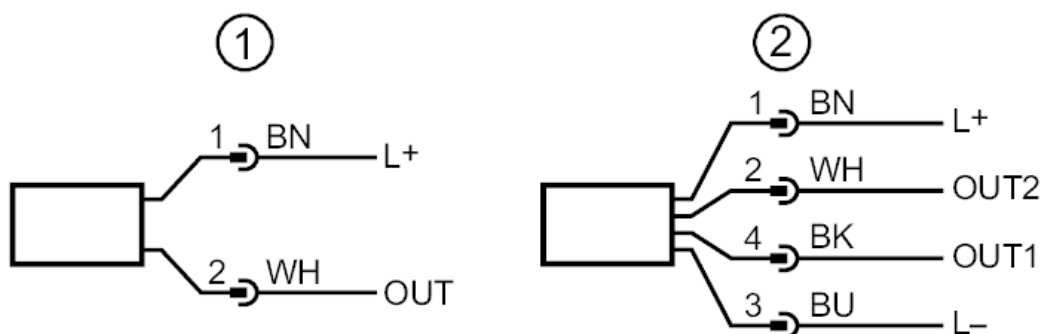
1 pcs.

Electrical connection

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



Connection



- 1 connection for 2-wire operation (analogue)
2 connection for 3-wire operation (analogue / IO-Link)
OUT1 : IO-Link
OUT2 : analogue output

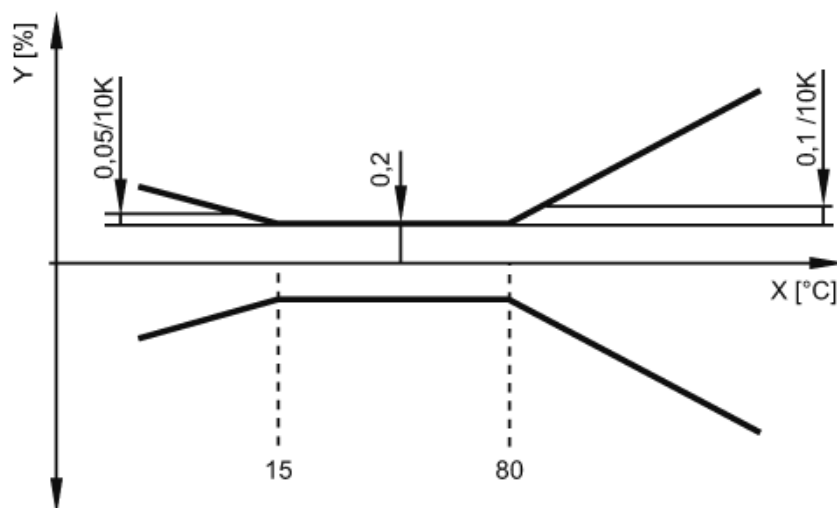


Flush pressure sensor

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Diagrams and graphs

ambient temperature influence on the accuracy



X temperature
Y total deviation