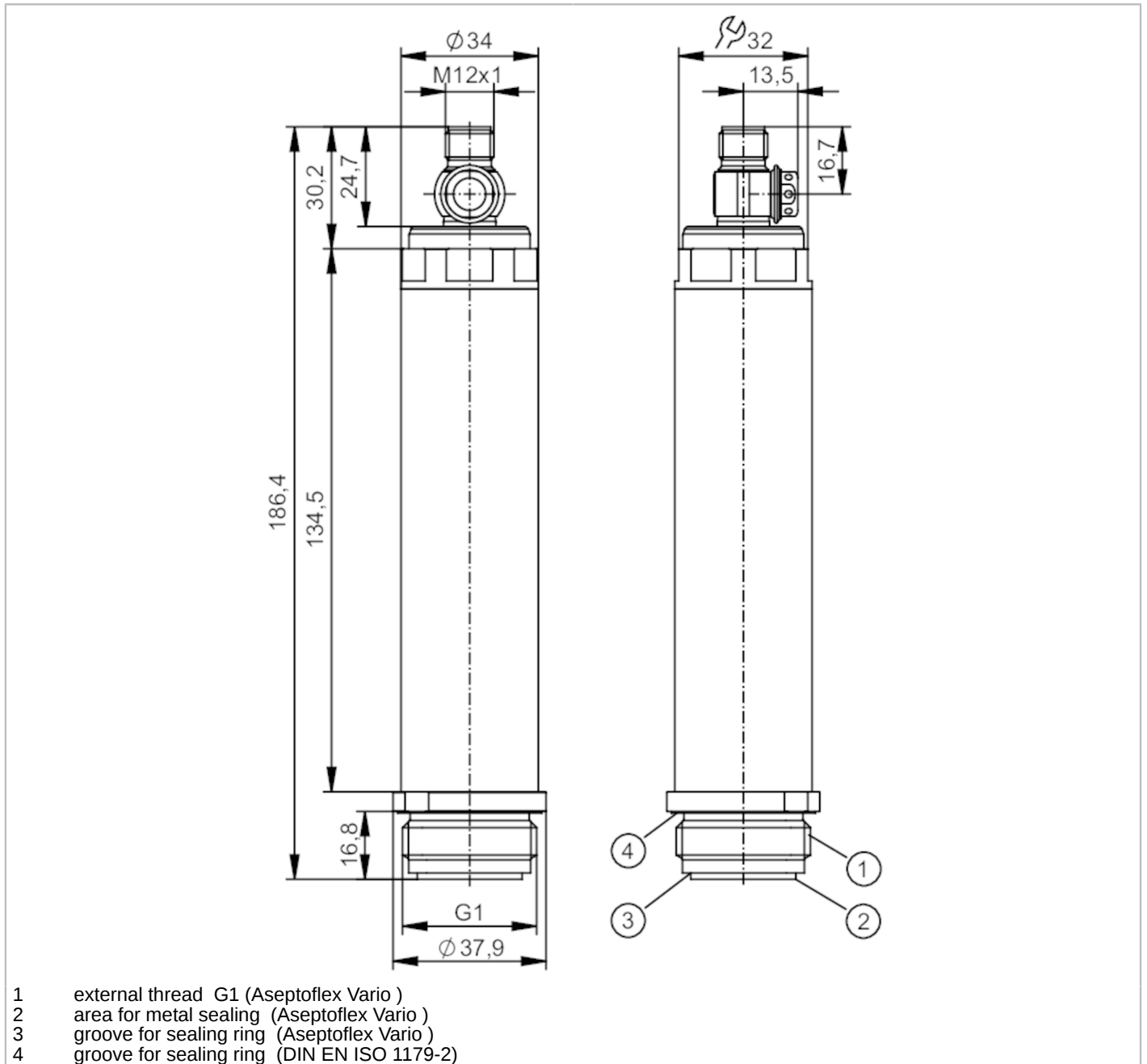


# PY2006



## 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)



### Product characteristics

Number of inputs and outputs	Number of analog 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

System	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 analog outputs: 1		
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### Outputs

Total number of outputs	1		
Output signal	analog signal; (configurable)		
Number of analog outputs	1		
Analog current output [mA]	4...20; (scalable)		
Max. load [Ω]	700; (U <sub>b</sub> = 24 V; (U <sub>b</sub> - 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
Analog start point	-125...2000 mbar	-1.82...29 psi	-12.5...200 kPa
Analog 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	<b>Temperature range</b>	<b>total deviation</b>
	-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	

Reaction times		
Damping for the analog output dAA	[s]	0...4
2-wire		
Step response time analog output	[ms]	30
3-wire		
Step response time analog 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 class		A
Process data analog		3
Min. process cycle time	[ms]	3.2
Supported DeviceIDs	<b>Type of operation</b>	<b>DeviceID</b>
	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 number	J025

Mechanical data		
Weight	[g]	554.7
Material		stainless steel (1.4404 / 316L); stainless steel (1.4301 / 304); PBT
Materials (wetted parts)		ceramics (99.9 % Al <sub>2</sub> O <sub>3</sub> ); stainless steel (1.4435 / 316L); 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

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## Flush pressure sensor

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### Remarks

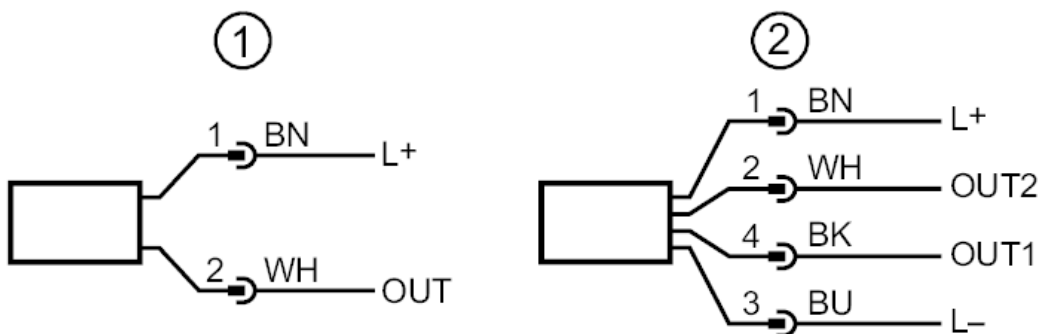
Pack quantity: 1 pcs.

### Electrical connection

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



### Connection



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

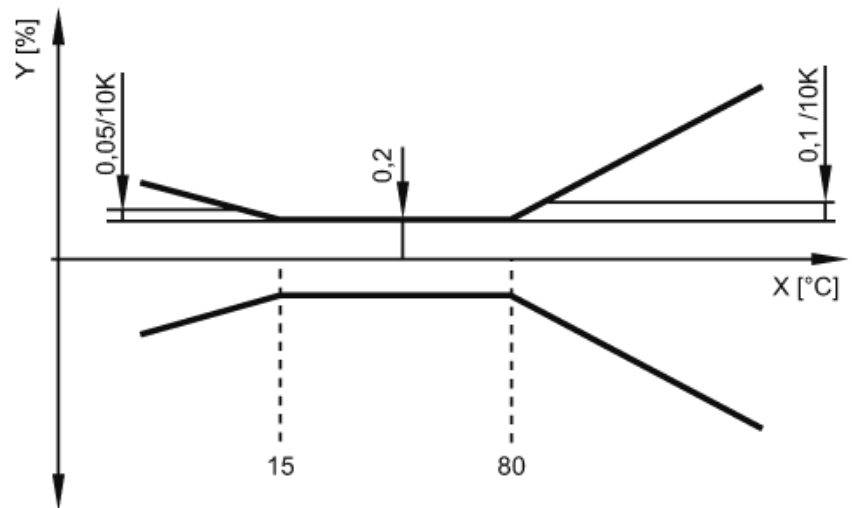


## Flush pressure sensor

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### Diagrams and graphs

ambient temperature influence on the accuracy



X temperature  
Y total deviation