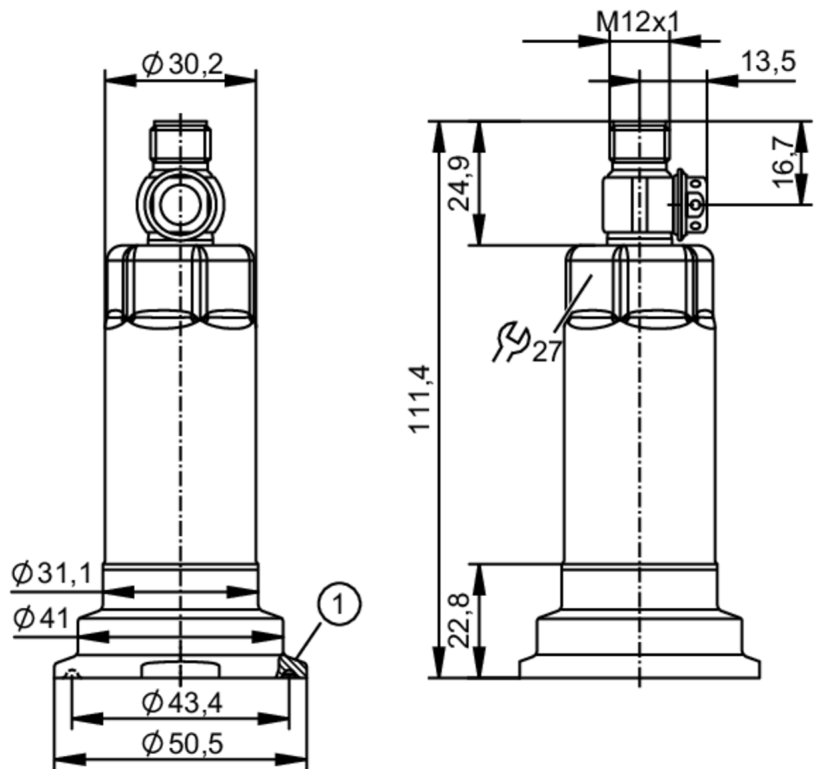


PM1108



Flush pressure sensor

PM-,25BREZ01-E-ZVG/US



- 1 clamp DN25...DN40 (1...1.5") DIN 32676 (ISO 2852)
the seal for the Triclamp process connection must have an inner diameter of at least 22 mm



ACS



CRN



EC 1935/2004

EHEDG Certified

FCM CN

FCM JP



IO-Link



Reg31

UK
CA

Product characteristics

Number of inputs and outputs	Number of digital outputs: 1; Number of analog outputs: 1			
Measuring range	-0.0125...0.25 bar	-12.5...250 mbar	-0.182...3.626 psi	-1.25...25 kPa
Process connection	Clamp DN25...DN40 (1...1.5") DIN 32676 (ISO 2852)			

Application

Special feature	gold-plated contacts		
Measuring element	ceramic-capacitive pressure measuring cell		
Temperature monitoring	no		
Application	flush mountable for the food and beverage industry		
Media	viscous media and liquids with suspended particles; liquids and gases		
Medium temperature [°C]	-25...150		
Min. burst pressure	30000 mbar	435 psi	3000 kPa
Pressure rating	5000 mbar	73 psi	500 kPa
Note on pressure rating	take into account the pressure resistance of the bracket and the seal used for clamp connection		
Vacuum resistance	-1000 mbar	-0.1 MPa	
Type of pressure	relative pressure		
No dead space	yes		



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MAWP (for applications according to CRN)	0.25 bar	0.025 MPa		
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 digital outputs: 1; Number of analog outputs: 1			
Outputs				
Total number of outputs	2			
Output signal	analog signal; IO-Link; (configurable)			
Number of digital outputs	1; (IO-Link)			
Number of analog outputs	1			
Analog current output [mA]	4...20; (scalable)			
Max. load [Ω]	700; (Ub = 24 V; (Ub - 9 V) / 21.5 mA)			
Short-circuit proof	yes			
Overload protection	yes			
Measuring/setting range				
Measuring range	-0.0125...0.25 bar	-12.5...250 mbar	-0.182...3.626 psi	-1.25...25 kPa
Analog start point	-12.5...200 mbar	-0.182...2.9 psi	-1.25...20 kPa	
Analog end point	37.5...250 mbar	0.544...3.626 psi	3.75...25 kPa	
In steps of	0.1 mbar	0.002 psi	0.01 kPa	
Factory setting	ASP = 0.0 mbar	AEP = 250 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 $\pm 0,1$ % of the span / 10 K
	15...80 °C	Characteristics deviation
	80...150 °C	Characteristics deviation $\pm 0,15$ % 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	
SDCI standard	IEC 61131-9	
Profiles	Smart Sensor - SSP 3.1	Measuring Sensor
	Common - I&D	Identification and Diagnosis
SIO mode	no	
Required master port class	A	
Process data analog	3	
Min. process cycle time	[ms]	3.2
IO-Link resolution pressure	[mbar]	0.05
IO-Link process data (cyclical)	Function	bit length
	pressure	16
	device status	4
IO-Link functions (acyclical)	application specific tag; internal temperature	
Supported DeviceIDs	Type of operation	DeviceID
	default	669

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
Note on approval	Factory certificate available as download at www.factory-certificate.ifm	

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UL approval	UL approval number	J055
	File number UL	E174189

Mechanical data		
Weight	[g]	390.8
Housing		tubular
Dimensions	[mm]	Ø 30.2 / L = 111.4
Material		stainless steel (1.4404 / 316L); PBT
Materials (wetted parts)		ceramics (99.9 % Al2O3); stainless steel (1.4435 / 316L) surface characteristics: Ra < 0,4 µm / Rz = 4 µm; PTFE
Min. pressure cycles		100 million
Process connection		Clamp DN25...DN40 (1...1,5") DIN 32676 (ISO 2852)

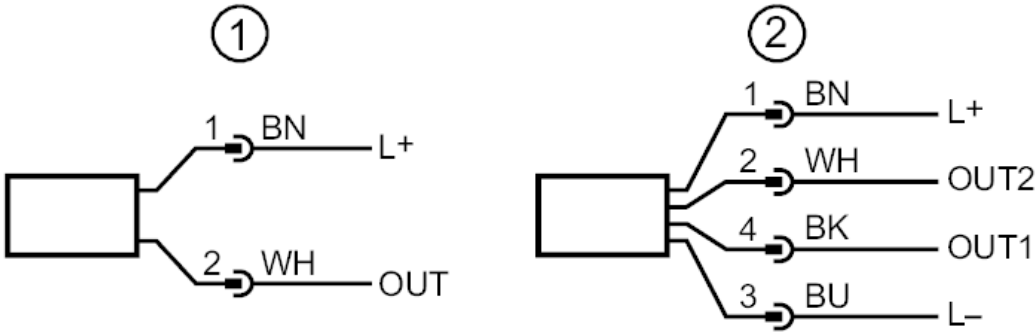
Remarks	
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Contacts: 4, gold-plated



Connection



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

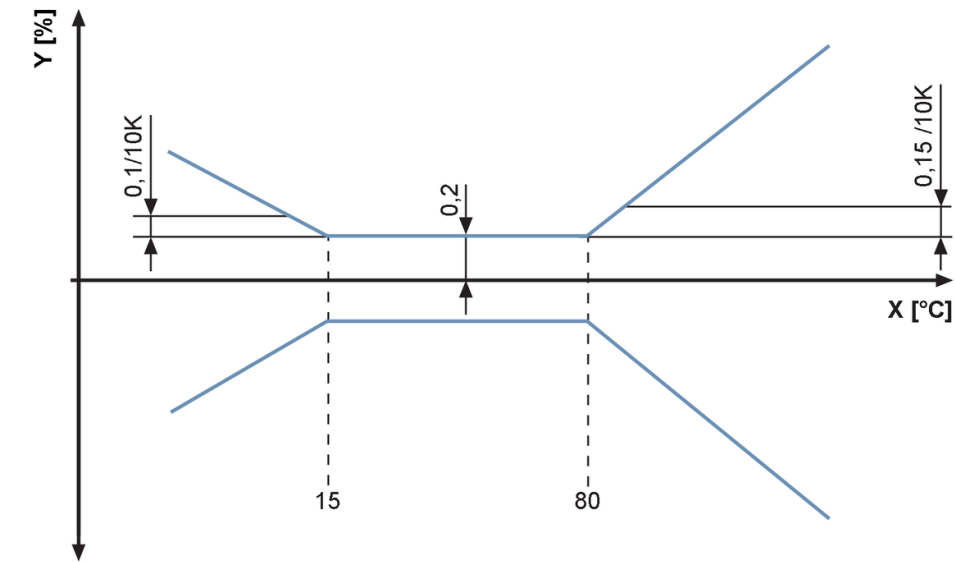


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Diagrams and graphs

ambient temperature influence on the accuracy



X temperature
Y total deviation