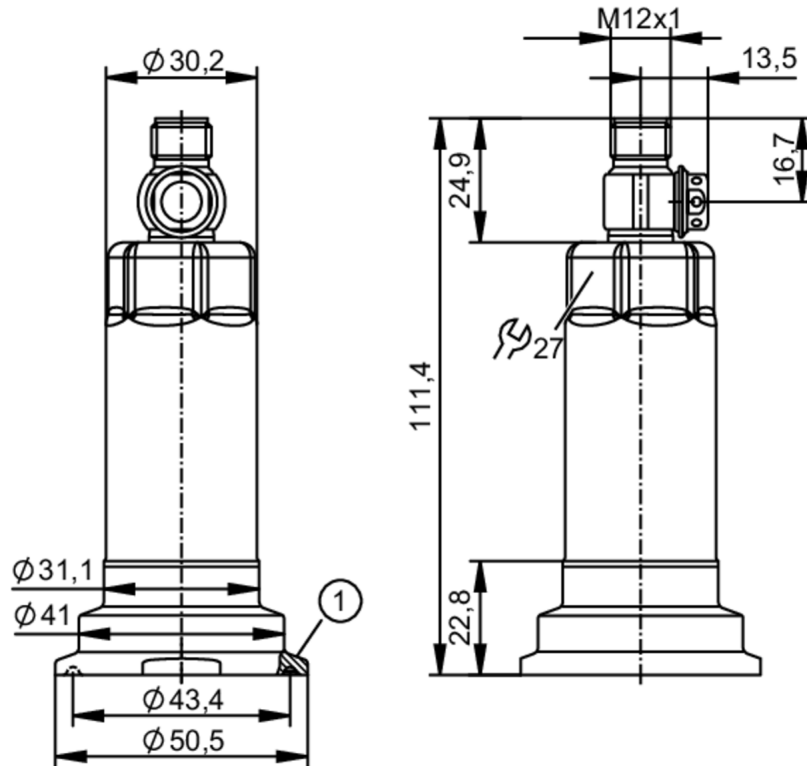


PM1118



Flush pressure sensor

PM-,40BREZ01-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



Product characteristics

Number of inputs and outputs	Number of digital outputs: 1; Number of analogue outputs: 1			
Measuring range	-0.05...0.4 bar	-50...400 mbar	-0.725...5.8 psi	-5...40 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. bursting pressure	30000 mbar	435 psi	3000 kPa
Pressure rating	8000 mbar	116 psi	800 kPa
Note on pressure rating	take into account the pressure resistance of the bracket and the seal used for clamp connection		
Vacuum resistance [mbar]	-1000		
Type of pressure	relative pressure		
No dead space	yes		

Electrical data

Operating voltage [V]	18...30 DC
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Flush pressure sensor

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Min. insulation resistance	[MΩ]	100; (500 V DC)			
Protection class		III			
Reverse polarity protection		yes			
Measuring principle		hydrostatic			
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 analogue outputs: 1			
Outputs					
Total number of outputs		2			
Output signal		analogue signal; IO-Link; (configurable)			
Number of digital outputs		1; (IO-Link)			
Number of analogue outputs		1			
Analogue 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		-0.05...0.4 bar	-50...400 mbar	-0.725...5.8 psi	-5...40 kPa
Analogue start point		-50...320 mbar	-0.725...4.641 psi	-5...32 kPa	
Analogue end point		30...400 mbar	0.435...5.802 psi	3...40 kPa	
In steps of		0.1 mbar	0.001 psi	0.01 kPa	
Factory setting		ASP = 0.0 mbar	AEP = 400 mbar		
Accuracy / deviations					
Repeatability	[X21]	< ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1)			
Characteristics deviation	[X21]	< ± 0,2 (DIN EN 61298-2); (incl. zero point and span error, non-linearity, hysteresis; Turn down 1:1)			
Linearity deviation	[X21]	< ± 0,15; (Turn down 1:1)			
Hysteresis deviation	[X21]	< ± 0,15; (Turn down 1:1)			
Long-term stability	[X21]	< ± 0,1; (Turn down 1:1; per year)			
Temperature coefficient zero point	[X22]	< ± 0,05			
Temperature coefficient span	[X22]	< ± 0,15			
Total deviation over temperature range		Temperature range		total deviation	
		-25...15 °C		Characteristics deviation ± 0,1 % интервалу / 10 K	
		15...80 °C		Characteristics deviation	
		80...150 °C		Characteristics deviation ± 0,15 % интервалу / 10 K	
Notes on the accuracy / deviation		for further details see section Diagrams and graphs			

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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	1410
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	[ANN]	323
Note on approval	factory certificate available as download at www.factory-certificate.ifm	
UL approval	UL Approval no.	J055
	File number UL	E174189
Mechanical data		
Weight	[g]	392.4
Materials	stainless steel (1.4404 / 316L); PBT	
Materials (wetted parts)	ceramics (99.9 % Al2O3); stainless steel (1.4435 / 316L); surface characteristics: Ra < 0,4 / Rz 4; PTFE	
Min. pressure cycles	100 million	
Process connection	Clamp DN25...DN40 (1...1,5") DIN 32676 (ISO 2852)	
Displays / operating elements		
Display unit	mbar; psi; kPa; mmWS; inH2O	
Remarks		
Pack quantity	1 pcs.	



Flush pressure sensor

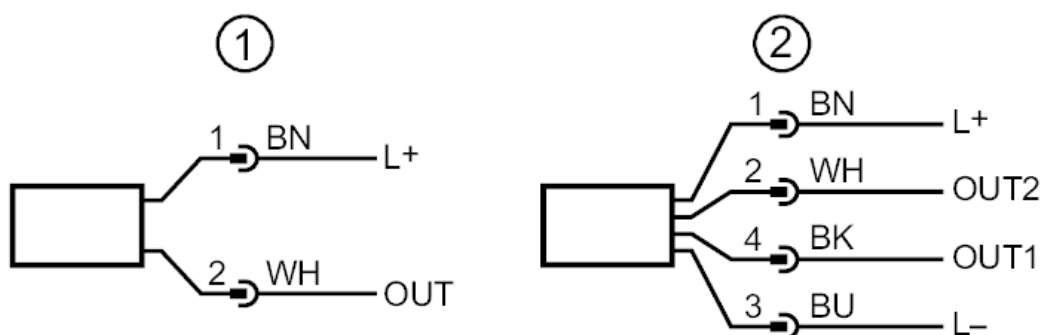
PM-,40BREZ01-E-ZVG/US

Electrical connection

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



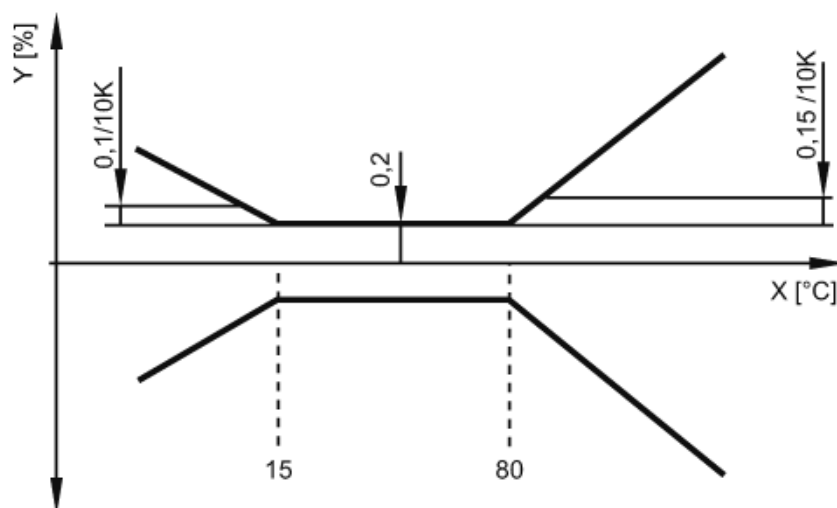
Connection



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

Diagrams and graphs

ambient temperature influence on the accuracy



X temperature
 Y total deviation