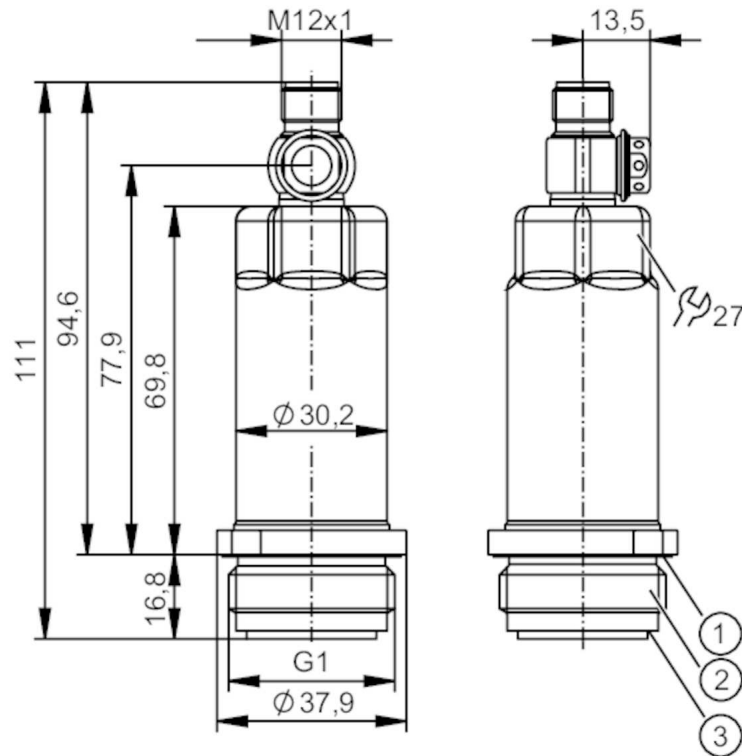


PM1718



Flush pressure transmitter

PM-,40BREA01-E-ZVG/US



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



Product characteristics

Number of inputs and outputs	Number of digital outputs: 1; Number of analog outputs: 1			
Measuring range	-0.05...0.4 bar	-50...400 mbar	-0.725...5.8 psi	-5...40 kPa
Process connection	threaded connection G 1 external thread Aseptoflex Vario			

Application

System	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
Vacuum resistance [mbar]	-1000		
Type of pressure	relative pressure		
No dead space	yes		

Electrical data

Operating voltage [V]	18...30 DC		
Min. insulation resistance [MΩ]	100; (500 V DC)		

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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 analog outputs: 1
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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; ($U_b = 24\text{ V}$; ($U_b - 9\text{ V}$) / 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
Analog start point	-50...320 mbar	-0.725...4.641 psi	-5...32 kPa	
Analog 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 [% of the span]	< $\pm 0,1$; (with temperature fluctuations < 10 K; Turn down 1:1)
Characteristics deviation [% of the span]	< $\pm 0,2$ (DIN EN 61298-2); (incl. zero point and span error, non-linearity, hysteresis; Turn down 1:1)
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)

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
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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	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				
IO-Link resolution pressure [mbar]	0.1				
IO-Link functions (acyclical)	application specific tag; internal temperature				
Supported DeviceIDs	<table><thead><tr><th>Type of operation</th><th>DeviceID</th></tr></thead><tbody><tr><td>default</td><td>1410</td></tr></tbody></table>	Type of operation	DeviceID	default	1410
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 [years]	364				
Mechanical data					
Weight [g]	272.05				
Material	stainless steel (1.4404 / 316L); PBT				
Materials (wetted parts)	ceramics (99.9 % Al ₂ O ₃); 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				
Displays / operating elements					
Display unit	mbar; psi; kPa; mmWS; inH ₂ O				
Remarks					
Pack quantity	1 pcs.				

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Flush pressure transmitter

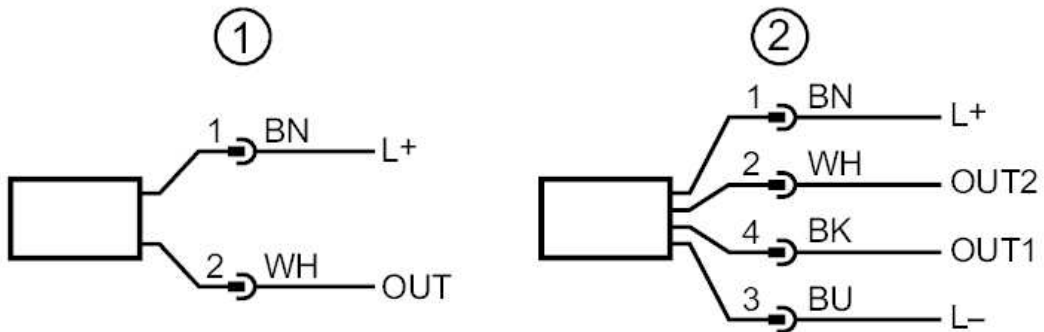
PM-,40BREA01-E-ZVG/US

Electrical connection

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



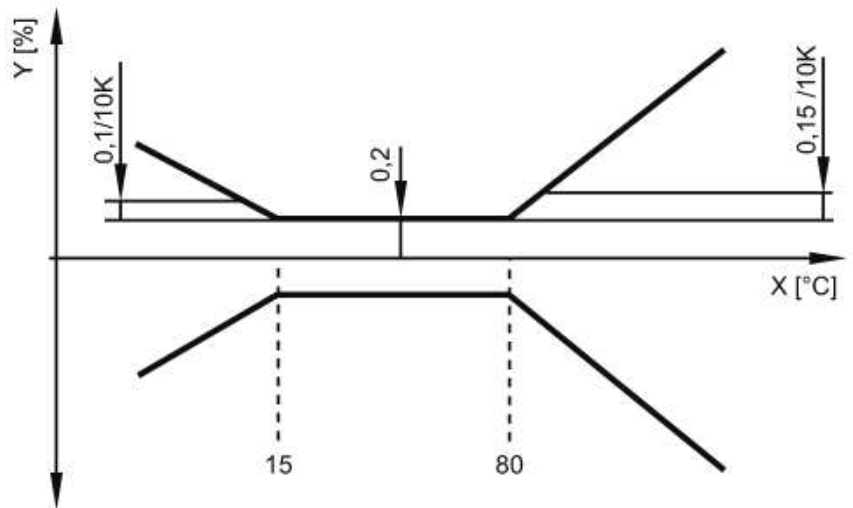
Connection



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

Diagrams and graphs

ambient temperature influence on the accuracy



X temperature
Y total deviation