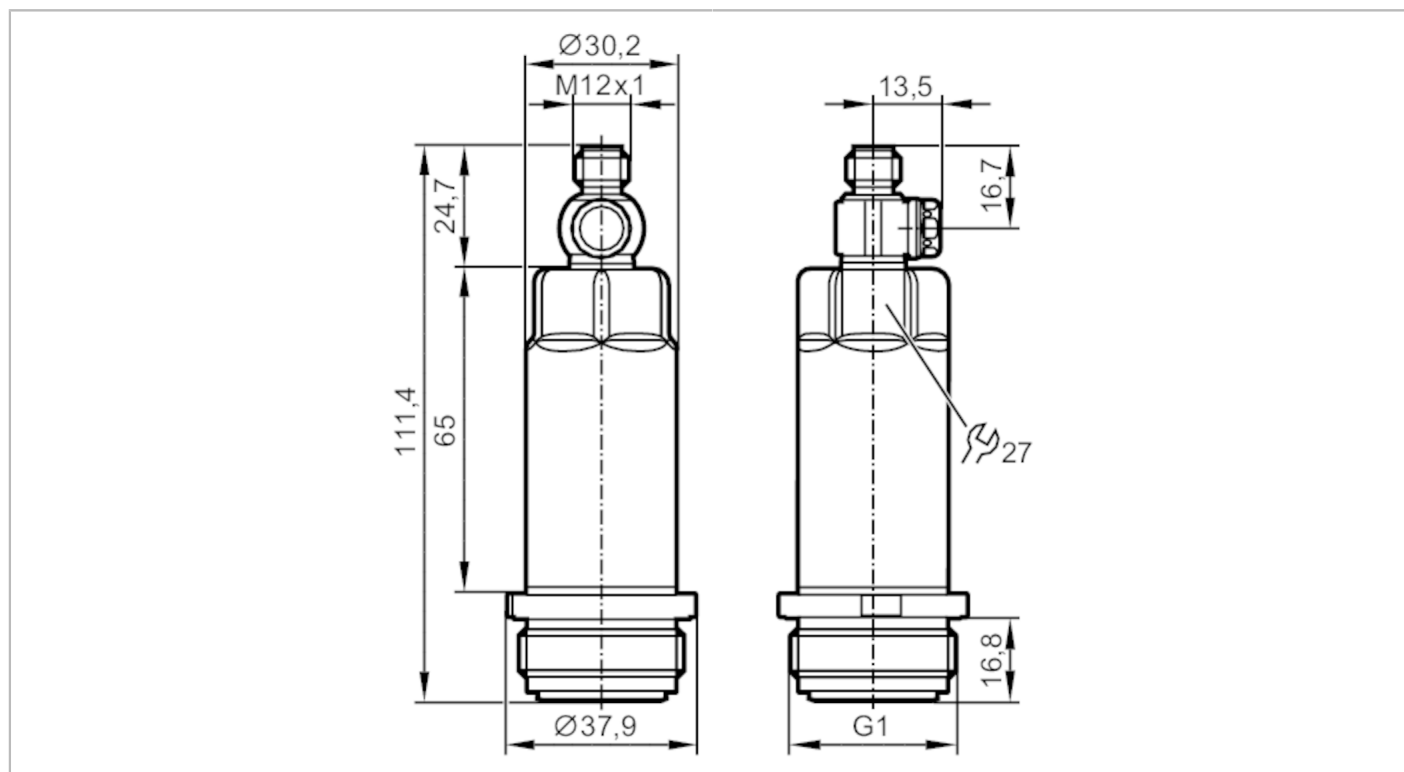


PM1708



Flush pressure transmitter

PM-,25BREA01-E-ZVG/US



EC 1935/2004 EHEDG Certified



Product characteristics

Number of inputs and outputs	Number of analogue outputs: 1			
Measuring range	-0.0125...0.25 bar	-12.5...250 mbar	-0.182...3.626 psi	-1.25...25 kPa
Process connection	threaded connection G 1 external thread Aseptoflex Vario			

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...125; (150 max. 1h)		
Min. bursting pressure	30000 mbar	435 psi	3000 kPa
Pressure rating	6000 mbar	84 psi	600 kPa
Vacuum resistance [mbar]	-1000		
Type of pressure	relative pressure		
No dead space	yes		
MAWP (for applications according to CRN) [bar]	10		

Electrical data

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



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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 analogue outputs: 1			
Outputs					
Total number of outputs		2			
Output signal		analogue signal; IO-Link; (configurable)			
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		-0.0125...0.25 bar	-12.5...250 mbar	-0.182...3.626 psi	-1.25...25 kPa
Analogue start point		-12.5...200 mbar	-0.182...2.9 psi		-1.25...20 kPa
Analogue 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)			
Temperature coefficient zero point	[% of the span / 10 K]	< ± 0,05; (0...70 °C)			
Temperature coefficient span	[% of the span / 10 K]	< ± 0,15; (0...70 °C)			
Response times					
Damping for the analogue output dAA	[s]	0...4			
2-wire					
Step response time analogue output	[ms]	30			

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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

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

UL approval

UL Approval no.

J021

Mechanical data

Weight [g]

273.45

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

Tightening torque [Nm]

35

Process connection

threaded connection G 1 external thread Aseptoflex Vario

Remarks

Pack quantity

1 pcs.

Electrical connection

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



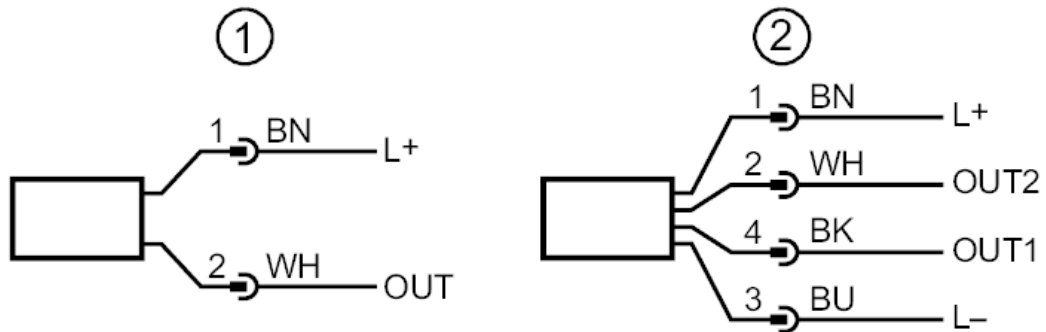
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Connection



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