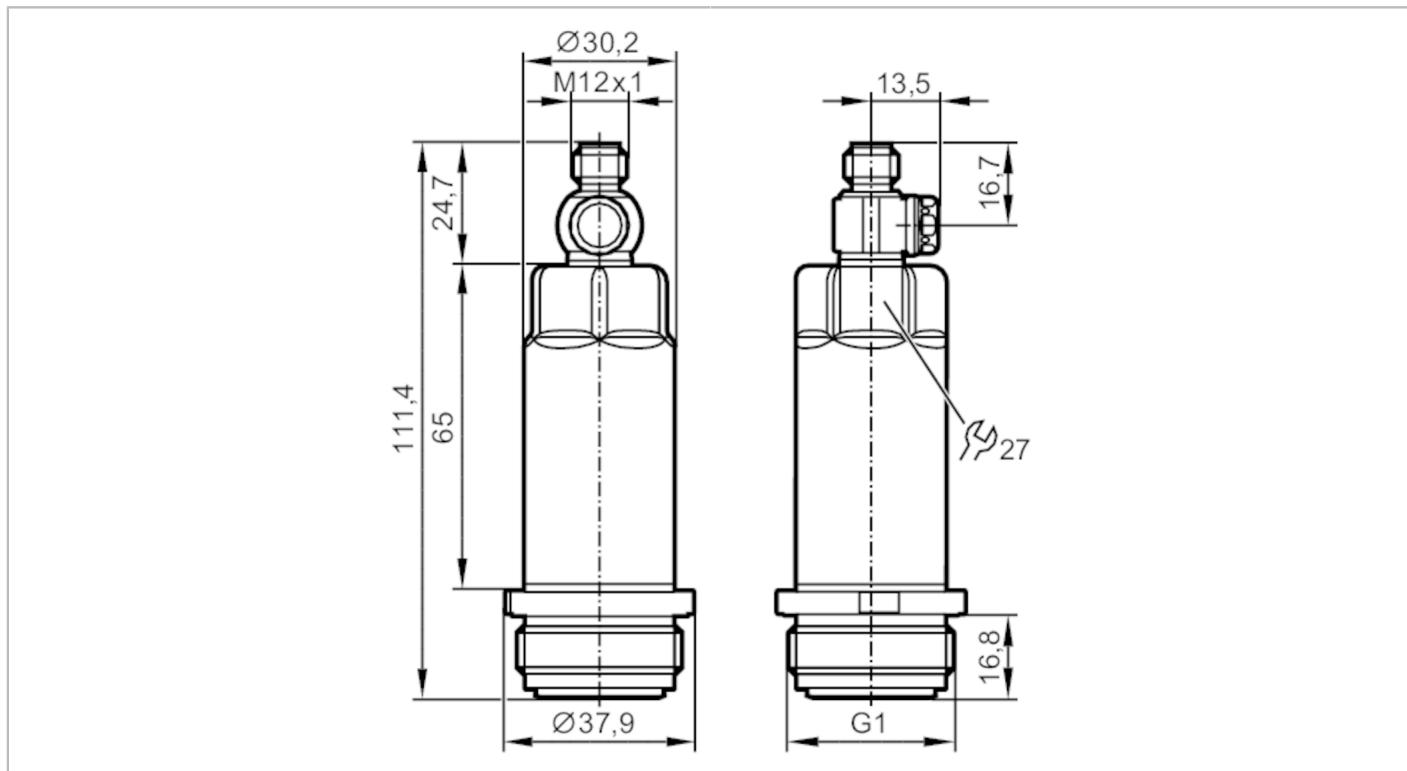


# PM1708

## Flush pressure transmitter

PM-,25BREA01-E-ZVG/US



ACS CRN EC 1935/2004 EHEDG Certified FCM Reg31

### 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
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			
<b>Inputs / outputs</b>					
Number of inputs and outputs	Number of analogue outputs: 1				
<b>Outputs</b>					
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				
<b>Measuring/setting range</b>					
Measuring range	-0.0125...0.25 bar	-12.5...250 mbar	-0.182...3.626 psi		
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			
<b>Accuracy / deviations</b>					
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)				
<b>Response times</b>					
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 [ms]  
output

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### 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 <a href="http://www.factory-certificate.ifm">www.factory-certificate.ifm</a>	
UL approval	UL Approval no.	J021

### Mechanical data

Weight [g]	273.45	
Materials	stainless steel (316L/1.4404); PBT	
Materials (wetted parts)	ceramics (99.9 % Al2O3); stainless steel (316L/1.4435); 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

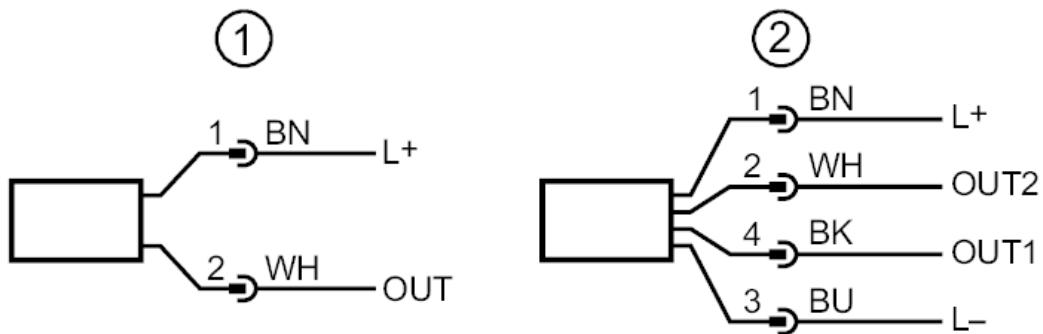
Connector: 1 x M12; coding: A; Contacts: gold-plated



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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