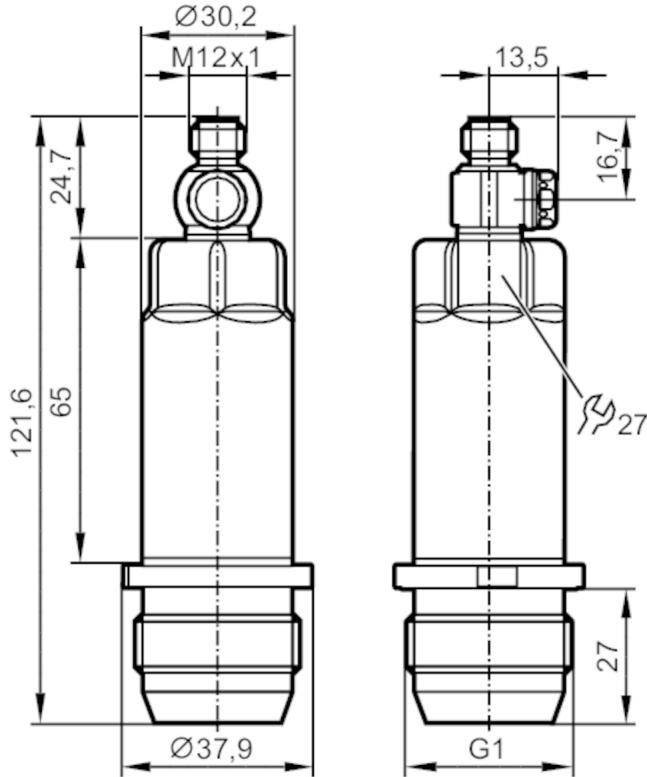


PM1608



Flush pressure transmitter

PM-,25BREA01-E-ZVG/US



A₃ ACS C E CRN EC 1935/2004 EHEDG Tested FCM FDA IO-Link Reg31 UK CA

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 sealing cone		

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)		

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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 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; ($U_b = 24 \text{ V}$; $(U_b - 9 \text{ V}) / 21.5 \text{ mA}$)		
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 bar	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		

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2-wire		
Step response time analogue [ms] output		30
3-wire		
Step response time analogue [ms] output		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.	J022
Mechanical data		
Weight [g]		304.8
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]		20
Process connection	threaded connection G 1 external thread sealing cone	
Remarks		
Pack quantity		1 pcs.

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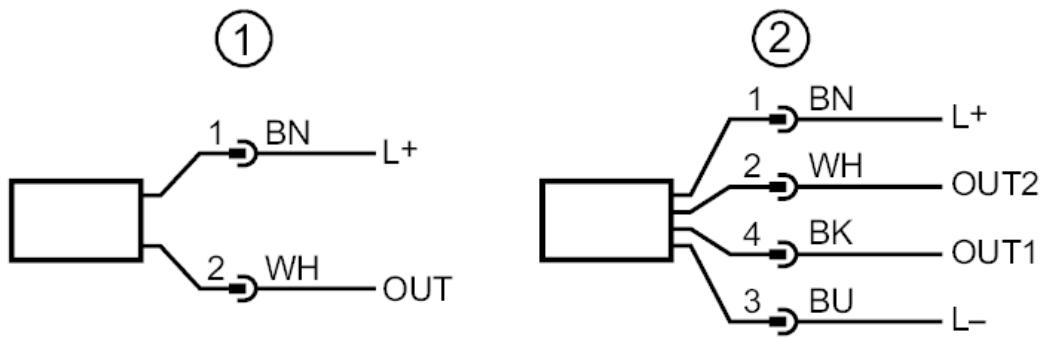
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Electrical connection

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



Connection



1
2

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