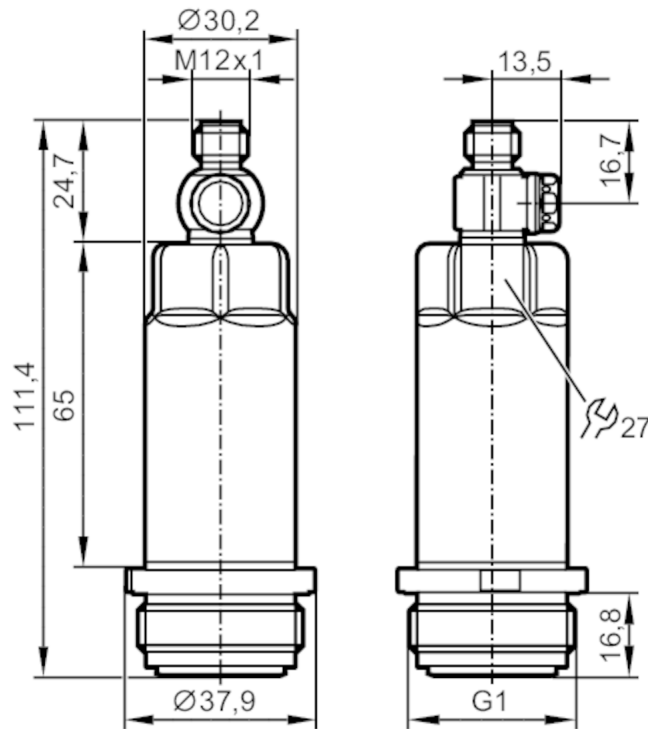


PM1718



Flush pressure transmitter

PM-,40BREA01-E-ZVG/US



EC 1935/2004 EHEDG Certified

FCM



Reg31

UK

CA

Product characteristics

Number of inputs and outputs	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...125; (150 max. 1h)		
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)
Protection class	III
Reverse polarity protection	yes
Measuring principle	hydrostatic
Integrated watchdog	yes



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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 analog outputs: 1		
Outputs				
Total number of outputs		2		
Output signal		analog signal; IO-Link; (configurable)		
Number of analog outputs		1		
Analog current output		4...20; (scalable)		
Max. load		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
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]		
Characteristics deviation		< ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1)		
		[% of the span]		
Linearity deviation		< ± 0,2 (DIN EN 61298-2); (incl. zero point and span error, non-linearity, hysteresis; Turn down 1:1)		
		[% of the span]		
Hysteresis deviation		< ± 0,15; (Turn down 1:1)		
		[% of the span]		
Long-term stability		< ± 0,15; (Turn down 1:1)		
		[% of the span]		
Temperature coefficient zero point		< ± 0,1; (Turn down 1:1; per year)		
		[% of the span / 10 K]		
Temperature coefficient span		< ± 0,05; (0...70 °C)		
		[% of the span / 10 K]		
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		

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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 class	A	
Process data analog	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 [years]	364	
Note on approval	Factory certificate available as download at www.factory-certificate.ifm	
UL approval	UL approval number	J021

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.

Electrical connection

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



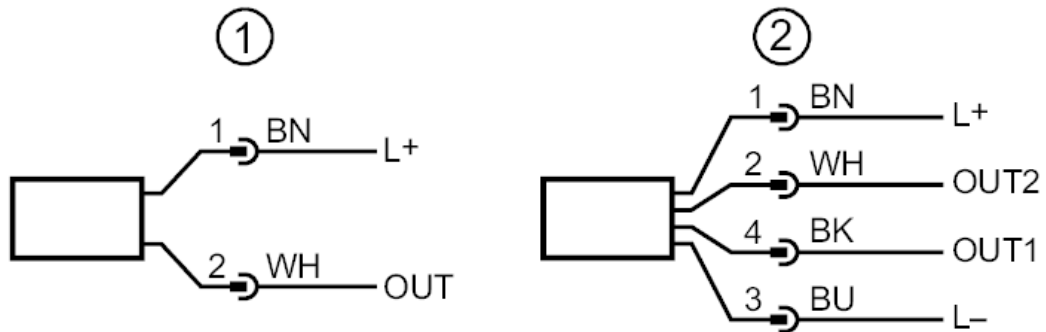
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Connection



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