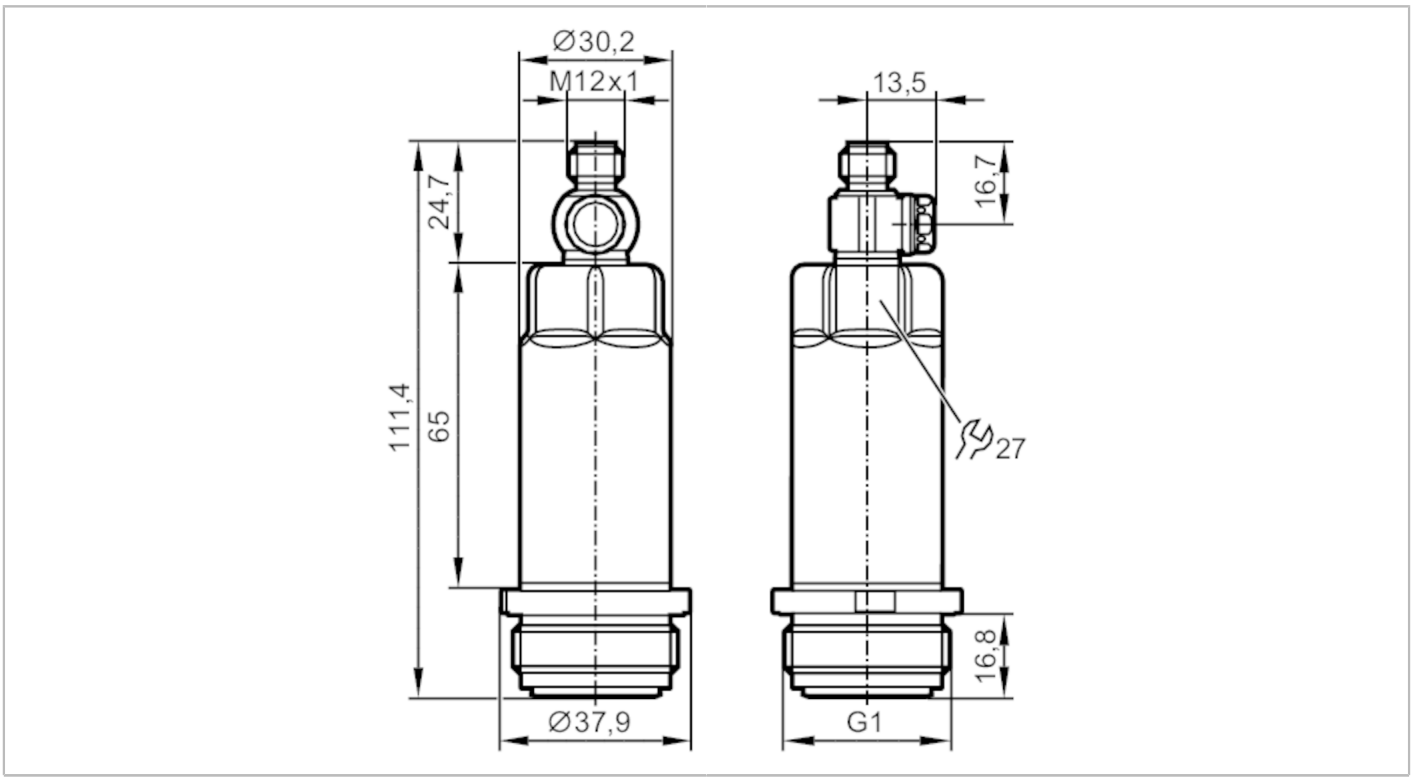
PM1715

Flush pressure transmitter

PM-006-REA01-E-ZVG/US



ACS CE CRN cULus LISTED EC 1935/2004 EHEDG Certified FCM FDA IO-Link Reg31 UKCA

Product characteristics				
Number of inputs and outputs		Number of analogue outputs: 1		
Measuring range		-1...6 bar	-14.5...87 psi	-100...600 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		100 bar	1450 psi	10000 kPa
Pressure rating		30 bar	435 psi	3000 kPa
Vacuum resistance	[mbar]	-1000		
Type of pressure		relative pressure; vacuum		
No dead space		yes		
MAWP (for applications according to CRN)	[bar]	30		
Electrical data				
Operating voltage	[V]	18...30 DC		
Min. insulation resistance	[MΩ]	100; (500 V DC)		
Protection class		III		
Reverse polarity protection		yes		

PM1715

Flush pressure transmitter

PM-006-REA01-E-ZVG/US

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		-1...6 bar	-14.5...87 psi	-100...600 kPa
Analogue start point		-1...4.8 bar	-14.5...69.6 psi	-100...480 kPa
Analogue end point		0.2...6 bar	2.9...87 psi	20...600 kPa
In steps of		0.02 bar	0.05 psi	0.2 kPa
Factory setting			ASP = 0.0 bar	AEP = 6.0 bar
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		

PM1715

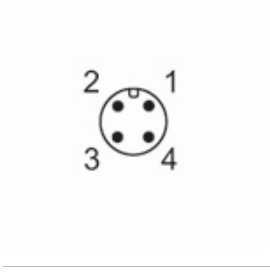
Flush pressure transmitter

PM-006-REA01-E-ZVG/US

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	663
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]	308	
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

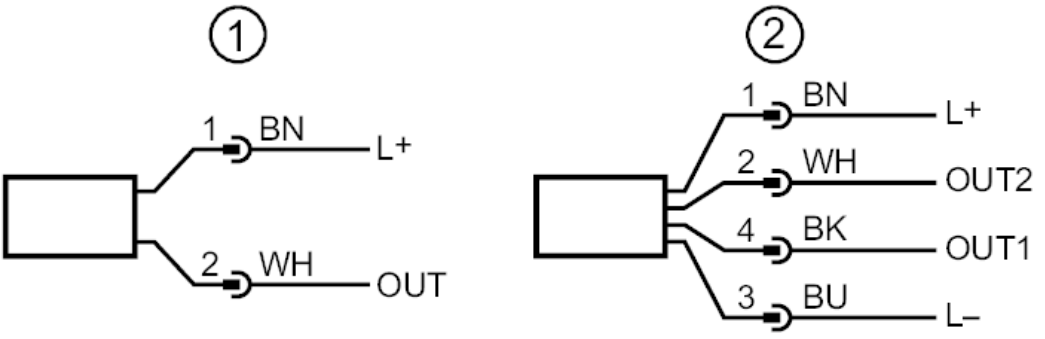


PM1715

Flush pressure transmitter

PM-006-REA01-E-ZVG/US

Connection



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