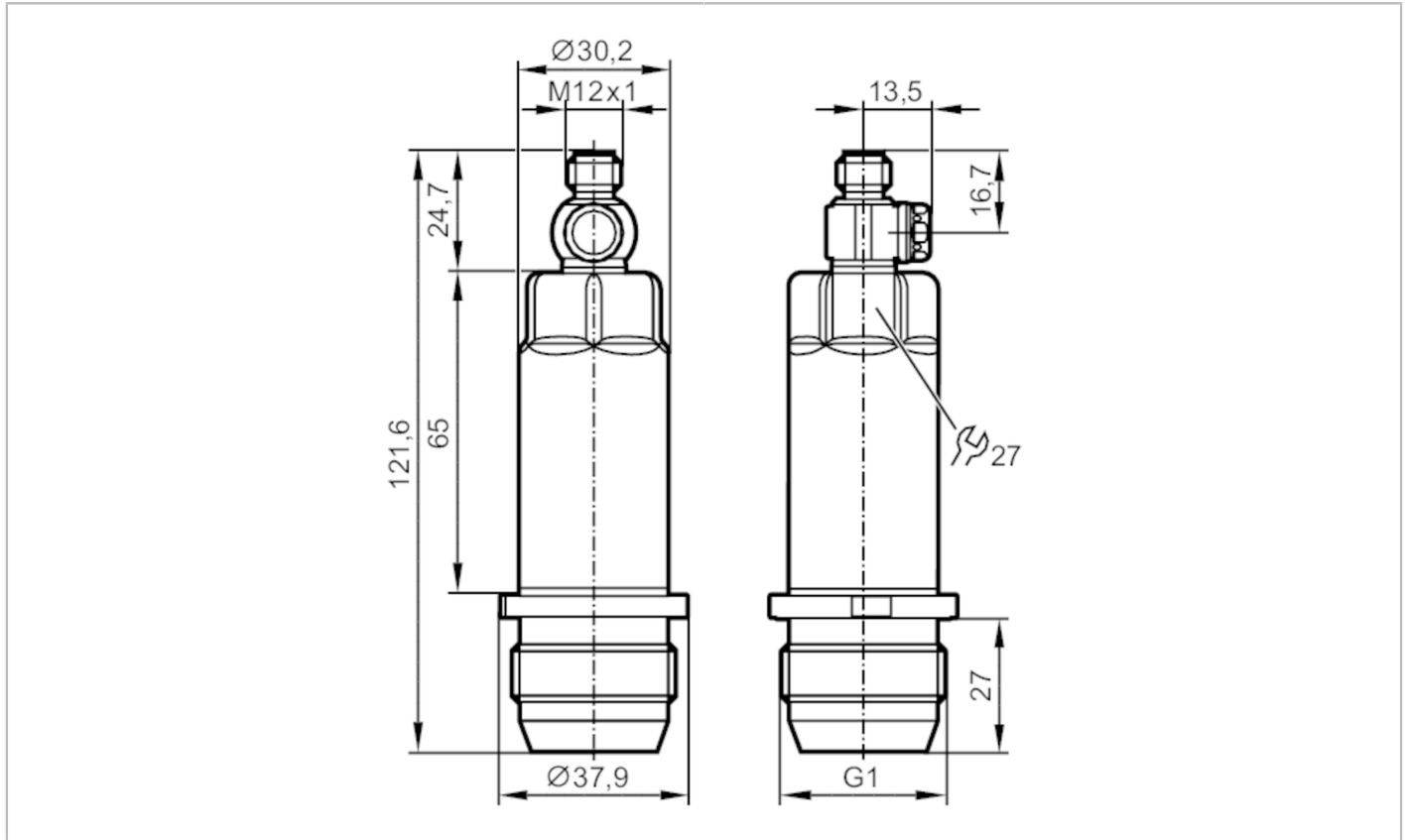


PM1608



Electronic pressure sensor

PM-,25BREA01-E-ZVG/US



Product characteristics	
Output signal	analogue signal
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 sealing cone
Application	
Special feature	Gold-plated contacts
Measuring element	ceramic-capacitive pressure measuring cell
Application	food and beverage industry
Media	viscous media and liquids with suspended particles; liquids and gases
Medium temperature [°C]	-25...125; (150 max. 1h)
Pressure rating	6000 mbar 84 psi 600 kPa
Min. bursting pressure	30000 mbar 435 psi 3000 kPa
Vacuum resistance [mbar]	-1000
Type of pressure	relative pressure
No dead space	yes
MAWP (for applications according to CRN) [bar]	10

PM1608



Electronic pressure sensor

PM-,25BREA01-E-ZVG/US

Electrical data					
Operating voltage	[V]	18...30 DC			
Min. insulation resistance	[MΩ]	100; (500 V DC)			
Protection class		III			
Reverse polarity protection		yes			
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		1			
Output signal		analogue signal			
Number of analogue outputs		1			
Analogue current output	[mA]	4...20; (scalable)			
Max. load	[Ω]	700; (U _b = 24 V; (U _b - 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 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 (nach DIN EN 61298-2); (incl. drift when overtightened, zero point and span error, non-linearity, hysteresis; Turn down 1:1)			
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)			

PM1608



Electronic pressure sensor

PM-,25BREA01-E-ZVG/US

Response times		
Damping for the analogue output dAA	[s]	0...4
2-wire		
Step response time analogue output	[ms]	30
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
IO-Link device ID		669 d / 00 02 9d h
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
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
UL approval	UL Approval no.	J022
Mechanical data		
Weight	[g]	302.4
Materials		stainless steel (1.4404 / 316L); PBT
Materials (wetted parts)		ceramics (99.9 % Al2O3); PTFE; stainless steel (1.4435 / 316L); surface characteristics: Ra < 0,4 / Rz 4
Min. pressure cycles		100 million
Tightening torque	[Nm]	20; (recommended tightening torque depends on lubrication, seal and pressure rating)
Process connection		threaded connection G 1 external thread sealing cone
Displays / operating elements		
Display unit		mbar; psi; kPa; mmWS; inH2O
Remarks		
Pack quantity		1 pcs.
Electrical connection		

Connector: 1 x M12; Contacts: gold-plated

PM1608

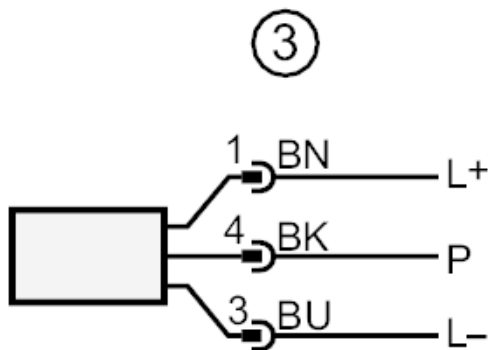
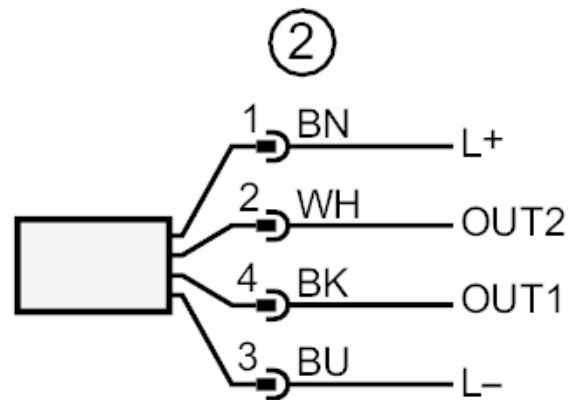
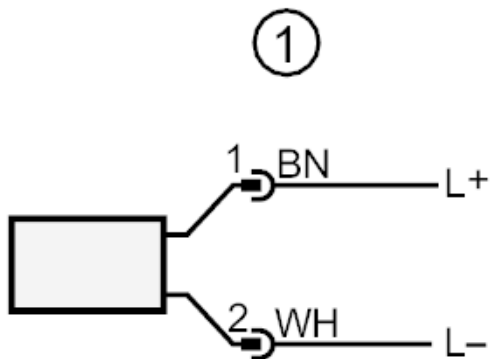


Electronic pressure sensor

PM-,25BREA01-E-ZVG/US



Connection



colours to DIN EN 60947-5-2

- 1 connection for 2-wire operation
- 2 connection for 3-wire operation
- 3 connection for IO-Link parameter setting (P = communication via IO-Link)

Core colours :

- BK = black
- BN = brown
- BU = blue
- WH = white