



OEM Pressure Transmitter Low Pressure

Applications

- ▶ general industrial applications

Characteristics

- ▶ piezoresistive stainless steel sensor
- ▶ accuracy:
0.5 % FSO IEC 60770
- ▶ nominal pressure ranges from
0 ... 100 mbar up to 0 ... 6 bar

Technical Data



Input pressure range											
Nominal pressure gauge	[bar]	0.1	0.16	0.25	0.4	0.6	1	1.6	2.5	4	6
Overpressure	[bar]	1	1	1	1	3	3	6	10	10	21
Burst pressure \geq	[bar]	1.5	1.5	1.5	1.5	5	5	10	17.5	17.5	35
Vacuum resistance		unlimited									
Output signal / Supply											
Standard		2-wire:		4 ... 20 mA		/ $V_s = 8 \dots 32 V_{DC}$					
Options 3-wire		3-wire:		0 ... 10 V		/ $V_s = 14 \dots 30 V_{DC}$					
		3-wire ratiometric:		$V_{SP} = 0.5 \dots 4.5 V$		/ $V_s = 5 \pm 0.5 V_{DC}$					
Performance											
Accuracy ¹		$\leq \pm 0.5 \% \text{ FSO}$									
Permissible load		2-wire:		$R_{max} = [(V_s - V_{s_{min}}) / 0.02] \Omega$							
		3-wire:		$R_{min} = 10 \text{ k}\Omega$							
Influence effects		supply:		0.05 % FSO / 10 V							
		load:		0.05 % FSO / k Ω							
Response time		2-wire:		$\leq 10 \text{ ms}$							
		3-wire:		$\leq 3 \text{ ms}$							
Measuring rate		1 kHz									
¹ accuracy according to IEC 60770 – limit point adjustment (non-linearity, hysteresis, repeatability)											
Thermal effects (Offset and Span) / Permissible temperatures											
Thermal error		$\leq \pm 0.3 \% \text{ FSO} / 10 \text{ K}$						in compensated range 0 ... 70 °C			
Permissible temperatures		medium / electronics / environment:		-25 ... 85 °C				storage: -40 ... 85 °C			
Electrical protection											
Short-circuit protection		permanent						3-wire ratiometric: none			
Reverse polarity protection		no damage, but also no function									
Electromagnetic compatibility		emission and immunity according to EN 61326									
Mechanical stability											
Vibration		10 g, 25 Hz ... 2 kHz						according to DIN EN 60068-2-6			
Shock		100 g / 1 msec.						according to DIN EN 60068-2-27			

Materials			
Pressure port / housing	stainless steel 1.4301 (304)		
Seals	FKM		
Diaphragm	stainless steel 1.4435 (316L)		
Media wetted parts	Pressure port, seals, diaphragm		
Miscellaneous			
Weight	approx. 120 g		
Current consumption	2-wire: max. 25 mA		3-wire ratiometric: typ. 1.5 mA
	3-wire voltage: typ. 5 mA (short circuit current: max. 20 mA)		
CE-conformity	EMC Directive: 2004/108/EC		
Wiring diagrams			
2-wire-system (current) 		3-wire-system (voltage) 	
Pin configuration			
Electrical connection	ISO 4400	M12x1 (4-pin)	cable colours (DIN 47100)
Supply +	1	1	wh (white)
Supply -	2	2	bn (brown)
Signal + (for 3-wire)	3	3	gn (green)
Shield	ground pin	4	gn/ye (yellow / green)
Electrical connections (dimensions in mm)			
<p>ISO 4400 (IP 65)</p> <p>M12x1, 4-pin (IP 67)</p> <p>cable gland with 2 m PVC cable (IP 67)</p>			
Mechanical connection (dimensions in mm)			
<p>G1/4" DIN 3852</p> <p>G1/4" EN 837</p> <p>1/4" NPT</p> <p>G1/2" N 837</p>			

This data sheet contains product specification, properties are not guaranteed. Subject to change without notice.