



# 18.601 G

## OEM Pressure Transmitter Low Pressure

### Applications:

- ▶ general industrial applications

### Characteristics:

- ▶ piezoresistive stainless steel sensor
- ▶ accuracy 0.5 % FSO according to 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:	$V_{Sig} = 0.5 \dots 4.5 V$				/ $V_S = 5 \pm 0.5 V_{DC}$						
Performance												
Accuracy <sup>1,2</sup>		$\leq \pm 0.5 \% FSO$										
Permissible load	2-wire:	$R_{max} = [(V_S - V_{S min}) / 0.02] \Omega$										
	3-wire:	$R_{min} = 10 k\Omega$										
Influence effects	supply:	0.05 % FSO / 10 V										
	load:	0.05 % FSO / k $\Omega$										
Response time	2-wire:	$\leq 10 \text{ msec}$						3-wire: $\leq 3 \text{ msec}$				
Measuring rate		1 kHz										
<sup>1</sup> accuracy according to IEC 60770 – limit point adjustment (non-linearity, hysteresis, repeatability)												
<sup>2</sup> for pressure ranges $\leq 160 \text{ mbar}$ accuracy is $\leq \pm 1\% FSO$												
Thermal effects (Offset and Span) / Permissible temperatures												
Thermal error		$\leq \pm 0.3 \% FSO / 10 K$						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		
Seals	FKM		
Diaphragm	stainless steel 1.4435		
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			
<b>2-wire-system (current)</b> 		<b>3-wire-system (voltage)</b> 	
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)			
<sup>3</sup> standard: 2 m PVC cable without ventilation tube (permissible temperature: -5 ... 70 °C) <sup>4</sup> different cable types and lengths available, permissible temperature depends on kind of cable			
Mechanical connection (dimensions in mm)			

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



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<b>Eingang</b>									
	[bar]								
	0,10	<sup>1</sup>	1	0	0	0			
	0,16	<sup>1</sup>	1	6	0	0			
	0,25		2	5	0	0			
	0,40		4	0	0	0			
	0,6		6	0	0	0			
	1,0		1	0	0	1			
	1,6		1	6	0	1			
	2,5		2	5	0	1			
	4,0		4	0	0	1			
	6,0		6	0	0	1			
	Sondermessbereiche		9	9	9	9			auf Anfrage
<b>Messgröße</b>									
	relativ				R				
<b>Ausgang</b>									
	4 ... 20 mA / 2-Leiter				1				
	0 ... 10 V / 3-Leiter				3				
	0,5 ... 4,5 V / 3-Leiter ratiometrisch				R				
	andere				9				auf Anfrage
<b>Genauigkeit</b>									
	0,5 % FSO				5				
	andere				9				auf Anfrage
<b>Elektrischer Anschluss</b>									
	Stecker und Kabeldose ISO 4400				1	0	0		
	Stecker M12x1 (4-polig), Kunststoff				M	0	0		
	Kabelausgang mit 2 m PVC-Kabel <sup>2</sup>				T	A	0		
	andere				9	9	9		auf Anfrage
<b>Mechanischer Anschluss</b>									
	G1/4" DIN 3852				3	0	0		
	G1/4" EN 837				4	0	0		
	1/4" NPT				N	4	0		
	G1/2" EN 837				2	0	0		
	andere				9	9	9		auf Anfrage
<b>Dichtung</b>									
	FKM						1		
	andere						9		auf Anfrage
<b>Sonderausführungen</b>									
	Standard						0	0	0
	andere						9	9	9

<sup>1</sup> bei Druckbereichen ≤ 160 mbar beträgt die Genauigkeit ≤ ± 1 % FSO  
<sup>2</sup> Standard: 2 m PVC-Kabel ohne Belüftungsschlauch (Temperaturreinsatzbereich: -5 ... 70 °C)

Die Angaben dieser Preisliste enthalten die Spezifikation der Produkte, nicht die Zusicherung von Eigenschaften. Ausführliche Informationen zu den Bestelloptionen können dem Datenblatt entnommen werden. Technische Änderungen vorbehalten.