

# 17.609 G

## OEM Pressure Transmitter



### Application

- ▶ refrigeration

### Characteristics

- ▶ stainless steel sensor, welded
- ▶ accuracy 0.5 % FSO according to IEC 60770
- ▶ nominal pressure ranges from 0 ... 6 bar up to 0 ... 60 bar  
-1 ... 6 bar up to -1 ... 60 bar

### Technical Data



<b>Pressure ranges</b>						
Nominal pressure gauge [bar]	6	10	16	25	40	60
Overpressure [bar]	14	35	35	70	140	140
Burst pressure $\geq$ [bar]	28	70	70	140	280	280
Vacuum resistance	unlimited					
<b>Vacuum ranges</b>						
Nominal pressure gauge [bar]	-1 ... 6	-1 ... 10	-1 ... 16	-1 ... 25	-1 ... 40	-1 ... 60
Overpressure [bar]	14	35	35	70	140	140
Burst pressure [bar]	28	70	70	140	280	280
<b>Output signal / Supply</b>						
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: $V_{Sio} = 0.5 \dots 4.5 V$ / $V_s = 5 \pm 0.5 V_{DC}$					
<b>Performance</b>						
Accuracy <sup>1</sup>	$\leq \pm 0.5 \% \text{ FSO}$					
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 $\Omega$		
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)						
<b>Thermal effects (Offset and Span) / Permissible temperatures</b>						
Thermal error	$\leq \pm 0.3 \% \text{ FSO} / 10 \text{ K}$		in compensated range		0 ... 70 °C	
Permissible temperatures	medium: -40 ... 125 °C		electronics / environment: -40 ... 85 °C		storage: -40 ... 85 °C	
<b>Electrical protection</b>						
Short-circuit protection	permanent		3-wire ratiometric: none			
Reverse polarity protection	no damage, but also no function					
Electromagnetic protection	emission and immunity according to EN 61326					
<b>Mechanical stability</b>						
Vibration	20 g, 25 Hz ... 2 kHz		according to DIN EN 60068-2-6			
Shock	500 g / 1 msec		according to DIN EN 60068-2-27			

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Technical Data

<b>Materials</b>				
Pressure port	stainless steel 1.4571			
Housing	stainless steel 1.4301			
Seal of sensor	none (welded)			
Diaphragm	stainless steel 1.4542			
Media wetted parts	pressure port, diaphragm			
<b>Miscellaneous</b>				
Mechanical connection	7/16"-20 UNF			
Weight	approx. 120 g			
Current consumption	2-wire: max. 25 mA		3-wire ratiometric: typ. 3 mA	
	3-wire voltage: typ. 5 mA (short circuit current: max. 20 mA)			
Long term stability	≤ ± 0.3 % FSO / year at reference conditions			
Operational life	> 100 x 10 <sup>6</sup> pressure cycles			
CE-conformity	EMC Directive: 2004/108/EC			
<b>Wiring diagrams</b>				
<b>2-wire-system (current)</b> 		<b>3-wire-system (voltage)</b> 		
<b>Pin configuration</b>				
Electrical connection	ISO 4400	Micro (contact distance 9.4 mm)	M12x1 (4-pin), plastic	cable colours (DIN 47100)
Supply +	1	1	1	wh (white)
Supply -	2	2	2	bn (brown)
Signal + (for 3-wire)	3	3	3	gn (green)
Shield	ground pin	ground pin	4	gn/ye (green / yellow)
<b>Dimensions (in mm)</b>				
ISO 4400 (IP 65)		Micro, contact distance 9.4 mm (IP 65)		M12x1, 4-pin (IP 67)
cable outlet with PVC-cable (IP 67) <sup>2,3</sup>				
<sup>2</sup> standard: 2 m PVC cable without ventilation tube (permissible temperature: -5 ... 70 °C) <sup>3</sup> different cable types and lengths available, permissible temperature depends on kind of cable				

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

