

## 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



Pressure ranges							
Nominal pressure gauge	[bar]	6	10	16	25	40	60
Overpressure	[bar]	12	20	32	50	80	120
Burst pressure ≥	[bar]	30	50	80	125	200	300
Vacuum resistance		unlimited					
Vacuum ranges							
Nominal pressure gauge	[bar]	-1 ... 6	-1 ... 10	-1 ... 16	-1 ... 25	-1 ... 40	-1 ... 60
Overpressure	[bar]	12	20	32	50	80	120
Burst pressure	[bar]	30	50	80	125	200	300
Output signal / Supply							
Standard		2-wire: 4 ... 20 mA		/	V <sub>S</sub> = 8 ... 32 V <sub>DC</sub>		
Options		3-wire: 0 ... 10 V		/	V <sub>S</sub> = 14 ... 30 V <sub>DC</sub>		
		3-wire ratiometric: 10 ... 90 % of V <sub>S</sub>		/	V <sub>S</sub> = 2.7 ... 5 V <sub>DC</sub>		
Performance							
Accuracy <sup>1</sup>		± 0.5 % FSO					
Permissible load		2-wire: R <sub>max</sub> = [(V <sub>S</sub> - V <sub>S min</sub> ) / 0.02 A] Ω			3-wire: R <sub>min</sub> = 10 kΩ		
Influence effects		supply: 0.05 % FSO / 10 V			load: 0.05 % FSO / kΩ		
Response time		2-wire: ≤ 10 msec			3-wire: ≤ 3 msec		
Long term stability		≤ ± 0.3 % FSO / year at reference conditions					
Measuring rate		1 kHz					
<sup>1</sup> accuracy according to IEC 60770 – limit point adjustment (non-linearity, hysteresis, repeatability)							
Thermal effects (Offset and Span) / Permissible temperatures							
Thermal error		± 0.3 % FSO / 10 K		in compensated range 0 ... 70 °C			
Permissible temperatures		medium: -40 ... 125 °C		electronics / environment: -40 ... 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 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		
<b>Materials</b>				
Pressure port	stainless steel 1.4571 (316Ti)			
Housing	stainless steel 1.4301 (304)			
Seal of sensor	none (welded)			
Diaphragm	stainless steel 1.4542 (630)			
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: max. 7 mA (short circuit current: max. 20 mA)			
Operational life	100 million load cycles			
CE-conformity	EMC Directive: 2014/30/EU			
<b>Wiring diagrams</b>				
2-wire-system (current)		3-wire-system (voltage)		
<b>Pin configuration</b>				
Electrical connection	ISO 4400	Micro (contact distance 9.4 mm)	M12x1 (4-pin), metal	cable colours (IEC 60757)
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	GNYE (green-yellow)
<b>Dimensions (in mm)</b>				
<p>ISO 4400 (IP 65)</p>		<p>Micro, contact distance 9.4 mm (IP 65)</p>		<p>M12x1, 4-pin (IP 67)</p>
				<p>cable outlet with PVC-cable (IP 67)<sup>2,3</sup></p>
<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				

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## Ordering code 17.609 G

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<b>Input</b>	[bar]																			
	6	6	0	0	1															
	10	1	0	0	2															
	16	1	6	0	2															
	25	2	5	0	2															
	40	4	0	0	2															
	60	6	0	0	2															
	-1 ... 6	V	6	0	2															
	-1 ... 10	V	1	0	3															
	-1 ... 16	V	1	6	3															
	-1 ... 25	V	2	5	3															
	-1 ... 40	V	4	0	3															
	-1 ... 60	V	6	0	3															
	customer	9	9	9	9															consult
<b>Pressure</b>	gauge						R													
<b>Output</b>																				
	4 ... 20 mA / 2-wire							1												
	0 ... 10 V / 3-wire							3												
	10 ... 90% of V <sub>S</sub> / 3-wire ratiometric							R												
<b>Accuracy</b>																				
	0.5 % FSO							5												
	customer							9												consult
<b>Electrical connection</b>																				
	male and female plug ISO 4400							1	0	0										
	male and female plug Micro							C	1	0										
	male plug M12x1 (4-pin), metal							M	2	0										
	customer							T	M	0										
	cable outlet with PVC-cable <sup>1</sup>							9	9	9										
	customer																			consult
<b>Mechanical connection / Seal</b>																				
	7/16"-20 UNF								U	0	0		2							
	customer								9	9	9		9							consult
<b>Special version</b>																				
	standard														0	0	0			
	customer														9	9	9			consult

<sup>1</sup> standard: 2 m PVC cable without ventilation tube (permissible temperatur: -5 ... 70 °C)