

17.609 G

OEM Pressure Transmitter

Application

- ▶ refrigeration

Characteristics

- ▶ stainless steel sensor, welded
- ▶ accuracy 0.5 % span according to EN IEC 62828-2
- ▶ 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	/ $V_S = 8 ... 32 V_{DC}$
Options 3-wire	3-wire:	0 ... 10 V	/ $V_S = 14 ... 30 V_{DC}$
	3-wire ratiometric:	10...90 % of V_S	/ $V_S = 2.7...5 V_{DC}$

Performance			
Accuracy ¹	≤ ± 0.5 % span		
Permissible load	2-wire: $R_{max} = [(V_S - V_S min) / 0.02 A] \Omega$	3-wire: $R_{min} = 10 k\Omega$	
Influence effects	supply: 0.05 % span / 10 V	load: 0.05 % span / kΩ	
Response time	2-wire: ≤ 10 msec	3-wire: ≤ 3 msec	
Long term stability	≤ ± 0.3 % span / year at reference conditions		
Measuring rate	1 kHz		

¹ accuracy according to EN IEC 62828-2– limit point adjustment (non-linearity, hysteresis, repeatability)

Thermal effects (Offset and Span) / Permissible temperatures			
Thermal error	≤ ± 0.3 % span / 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

Mechanical stability	
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

Materials				
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			
Miscellaneous				
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			
Wiring diagrams				
2-wire-system (current) 		3-wire-system (voltage) 		
Pin configuration				
Electrical connection	ISO 4400	Micro (contact distance 9.4 mm)	M12x1 (4-pin), metal	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)
Dimensions (in mm)				
ISO 4400 (IP 65)		Micro, contact distance 9.4 mm (IP 65)	M12x1, 4-pin (IP 67)	cable outlet with PVC-cable (IP 67) ^{2,3}
² standard: 2 m PVC cable without ventilation tube (permissible temperature: -5 ... 70 °C) ³ 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.

Ordering code OEM 17.609G

23.08.2024

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Input [bar]																			
0 ... 6	6	0	0	1															
0 ... 10	1	0	0	2															
0 ... 16	1	6	0	2															
0 ... 25	2	5	0	2															
0 ... 40	4	0	0	2															
0 ... 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															
Customer underpressure	X	X	X	X															
Pressure																			
Gauge					R														
Output																			
4 ... 20 mA / 2-wire																			1
0 ... 10 V / 3-wire																			3
10 ... 90% Vs / 3-wire ratiometric (Vs = 2,7 ... 5 V DC)																			R
Customer																			9
Accuracy																			
0,5 %																			5
0,5 % including Calibration Certificate																			T
Table of measured values for acc. 0,5 %																			N
Customer																			9
Electrical connection																			
Connector DIN 43650 (ISO 4400), IP 65																			1 0 0
Cable outlet (cable length needed, IP68) ¹																			T A 0
PVC cable/ + 1m																			
Customer																			9 9 9
Mechanical connection																			
7/16" - 20 UNF																			U 0 0
Customer																			9 9 9
Seals																			
Without- welded																			2
Customer																			9
Special version																			
Standard																			0 0 0
Customer																			9 9 9

0,-...without additional charge On request... in accordance with the producer
 1 - cable without through capillary (permissible temperature -5 ... +70 °C)
 Surcharges for calibration are not subject to any discounts. Subject to change.
 This document contains the specification for ordering the product; .
 detailed technical parameters of the product and its possible variants are given in the data sheet.
 BD SENSORS reserves the right to change sensor specifications without further notice.

