

18.601 G

OEM Pressure Transmitter Low Pressure

Applications

- ▶ general industrial applications

Characteristics

- ▶ piezoresistive stainless steel sensor
- ▶ accuracy 0.5 % span according to EN IEC 62828-2
- ▶ nominal pressure ranges from 0 ... 100 mbar up to 0 ... 6 bar



Technical Data

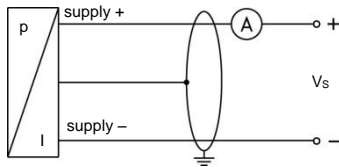


Input pressure range													
Nominal pressure gauge	[bar]	0.1	0.16	0.25	0.4	0.6	1	1.6	2.5	4	6		
Overpressure	[bar]	1	1	1	1	3	3	6	10	10	21		
Burst pressure ≥	[bar]	1.5	1.5	1.5	1.5	5	5	10	17.5	17.5	35		
Vacuum resistance		unlimited											
Output signal / Supply													
Standard		2-wire:		4 ... 20 mA		/		V _S = 8 ... 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		P _N > 160 mbar: ≤ ± 0.5 % span P _N ≤ 160 mbar: ≤ ± 1 % span											
Permissible load		2-wire: R _{max} = [(V _S - V _{S min}) / 0.02 A] Ω 3-wire: R _{min} = 10 kΩ											
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		≤ ± 0,2 % 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: -25 ... 125 °C				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							

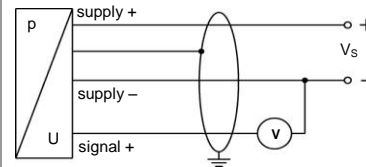
Materials	
Pressure port / housing	stainless steel 1.4301 (304)
Seals	FKM
Diaphragm	stainless steel 1.4435 (316 L)
Media wetted parts	pressure port, seals, diaphragm
Miscellaneous	
Weight	approx. 120 g
Current consumption	2-wire: max. 25 mA 3-wire ratiometric: typ. 1.5 mA 3-wire voltage: max. 7 mA (short circuit current: max. 20 mA)
Operational life	100 million load cycles
CE-conformity	EMC Directive: 2014/30/EU

Wiring diagrams

2-wire-system (current)



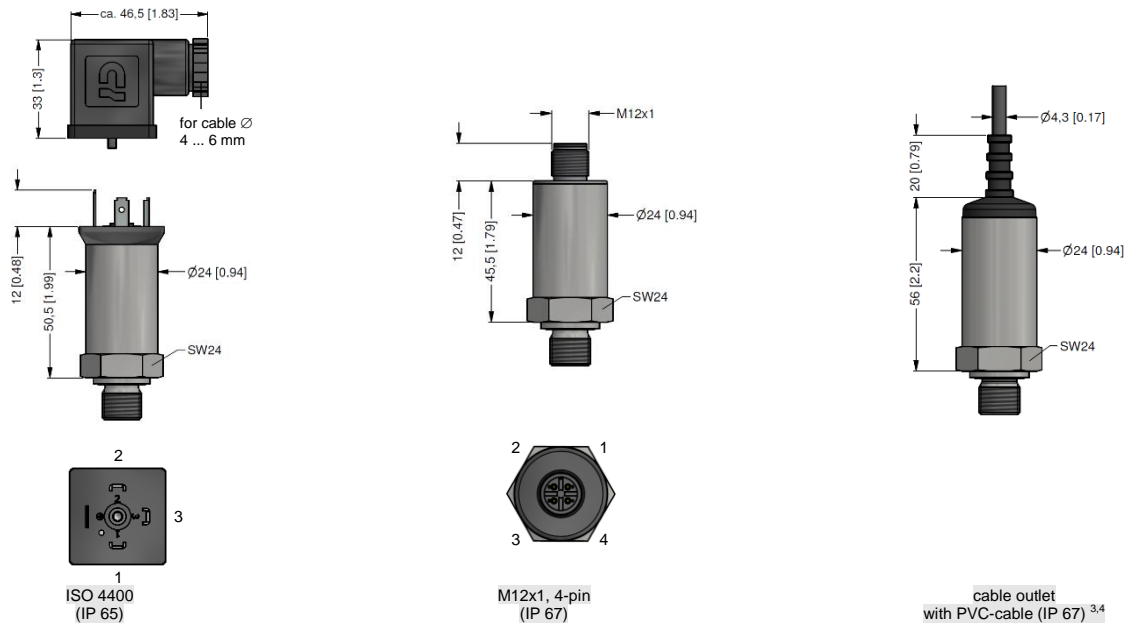
3-wire-system (voltage)



Pin configuration

Electrical connection	ISO 4400	M12x1 (4-pin), metal	cable colour (IEC 60757)
Supply +	1	1	WH (white)
Supply -	2	2	BN (brown)
Signal + (for 3-wire)	3	3	GN (green)
Shield	ground pin	4	GNYE (green-yellow)

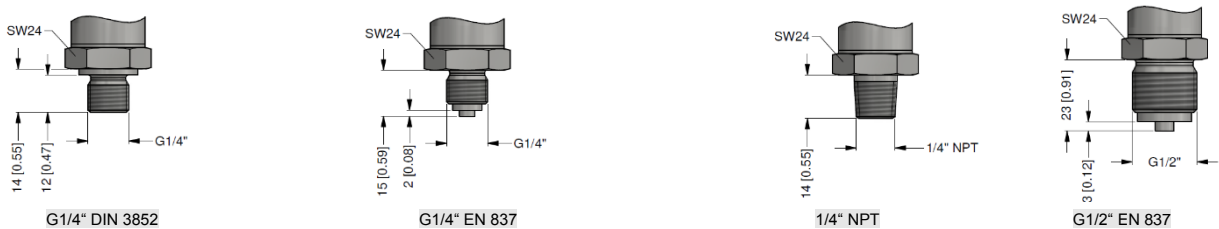
Electrical connections (dimensions in mm)



³ standard: 2 m PVC cable without ventilation tube (permissible temperature: -5 ... 70 °C)

⁴ different cable types and lengths available, permissible temperature depends on kind of cable

Mechanical connection (dimensions in mm)



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OEM Pressure Transmitter

The manufacturer provides the EU declaration of conformity.

Calibration - All production undergoes output control, which is performed by comparison with standards. The traceability of standards and working gauges is ensured in accordance with Act No. 505/1990, as amended, on metrology.

The manufacturer offers the possibility to supply sensors calibrated in the calibration laboratory of BD SENSORS, accredited according to ČSN EN ISO / IEC 17025: 2018.

Ordering code OEM 18.601G

9.12.2020

OEM 18.601G

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Input [bar]									
0 ... 0,1	1	0	0	0					
0 ... 0,16	1	6	0	0					
0 ... 0,25	2	5	0	0					
0 ... 0,4	4	0	0	0					
0 ... 0,6	6	0	0	0					
0 ... 1	1	0	0	1					
0 ... 1,6	1	6	0	1					
0 ... 2,5	2	5	0	1					
0 ... 4	4	0	0	1					
0 ... 6	6	0	0	1					
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	
Customer								9	
Accuracy									
0.5 % (P _N > 160 mbar)								5	
1 % (P _N ≤ 160 mbar)								8	
Customer								9	
Electrical connection									
Connector DIN 43650 (ISO 4400) (IP 65)								1	0
Connector M12 x 1, 4-pin (IP 67)								M	0
Connector M12 x 1, 4-pin (IP 67) - metal								M	1
Cable outlet / cable length specify (IP 67) ¹								T	A
+ PVC cable / 1 m									0
Customer								9	9
Mechanical connection									
G 1/2" DIN 3852								1	0
G 1/2" EN 837								2	0
G 1/4" DIN 3852								3	0
G 1/4" EN 837								4	0
G 1/4" internal								J	0
1/4" NPT								N	4
Customer								9	9
Seals									
Viton (FKM)									1
Customer									9
Special version									
Standard									0
Customer									0
									0
									9
									9



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The company BD SENSORS s.r.o. is certified by TÜV SÜD Czech according to the standard ISO 9001.

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.



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