

18.600 G

OEM Pressure Transmitter Pneumatics

Applications

- ▶ compressed air network
- ▶ general mechanical engineering

Characteristics

- ▶ silicon sensor without media isolation
- ▶ 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			-1 ... 0	0.1	0.25	0.4	0.6	1	1.6	2.5	4	6
Nominal pressure gauge	[bar]											
Overpressure	[bar]		3	0.5	1	1	3	3	6	10	10	20
Burst pressure	[bar]		5	1,5	3	3	3	7,5	7,5	15	25	25

Output signal / Supply				
Standard	2-wire:	4 ... 20 mA	/	$V_S = 8 \dots 32 V_{DC}$
Option	3-wire:	0 ... 10 V	/	$V_S = 14 \dots 30 V_{DC}$
	3-wire ratiometric:	10...90 % of V_S	/	$V_S = 2.7 \dots 5 V_{DC}$

Performance				
Accuracy ¹		$\leq \pm 0.5 \% \text{ span}$		
Permissible load	2-wire:	$R_{max} = [(V_S - V_{Smin}) / 0.02 A] \Omega$		
	3-wire:	$R_{min} = 10 k\Omega$		
Influence effects	supply:	0.05 % span / 10 V	load:	0.05 % span / k Ω
Response time	2-wire:	$\leq 10 \text{ msec}$	3-wire:	$\leq 3 \text{ msec}$
Long term stability	$\leq \pm 0,2 \% \text{ span / year at reference conditions}$			
Measuring rate	1 kHz			

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

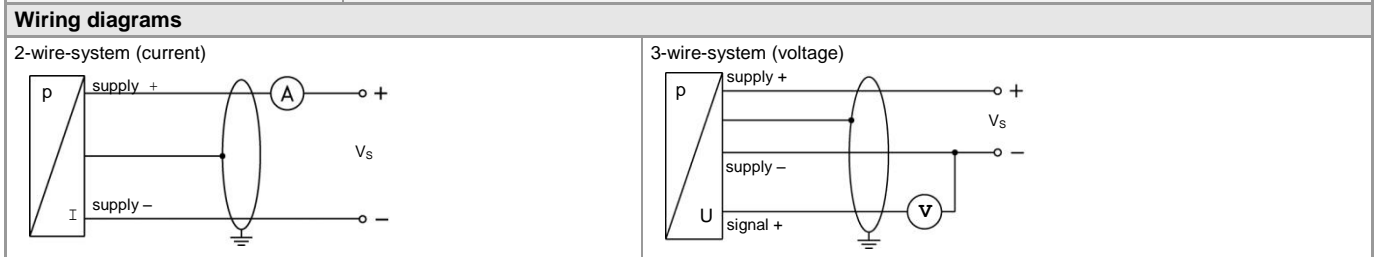
Thermal effects (Offset and Span)				
Nominal pressure P_N	[bar]	-1 ... 0	≤ 0.4	> 0.4
Tolerance band	[% span]	$\leq \pm 1$	$\leq \pm 1$	$\leq \pm 0.75$
in compensated range	[°C]	0 ... 70		-20 ... 85

Permissible temperatures				
Permissible temperatures	medium:	-25 ... 125 °C	electronics / environment:	-25 ... 85 °C
	storage:	-40 ... 85 °C		

Electrical protection		
Short-circuit protection	permanent	
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 / 11 msec	according to DIN EN 60068-2-27

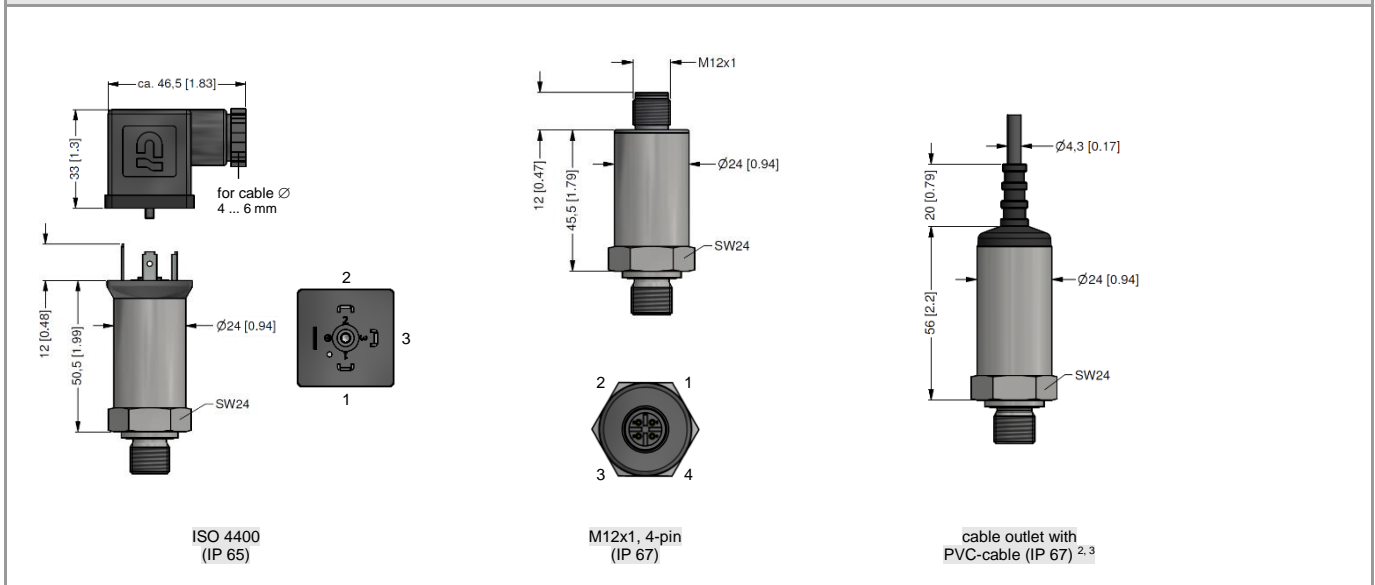
Materials	
Pressure port / housing	stainless steel 1.4301 (304)
Seals	FKM
Sensor	stainless steel 1.4404 (316L), silicon, glass, epoxy or RTV
Media wetted parts	pressure port, seals, sensor
Miscellaneous	
Weight	approx.. 120 g
Permissible media	pressurized air, non-aggressive gases
Current consumption	2-wire: max. 25 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



Pin configuration

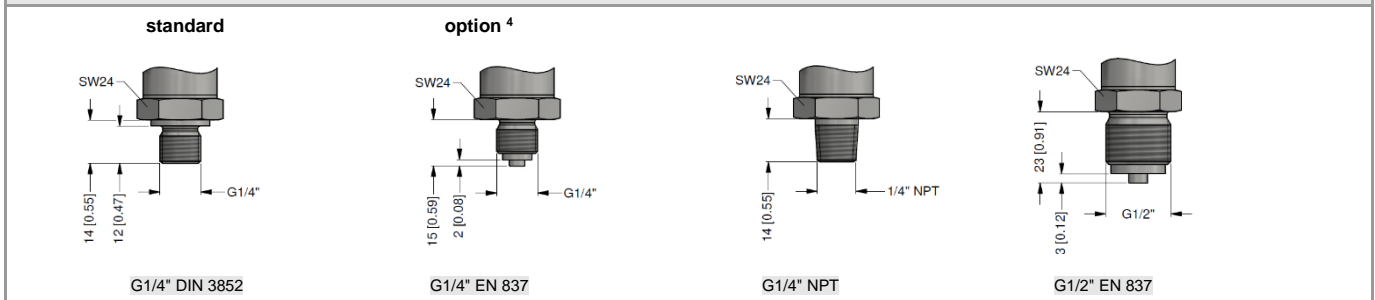
Electrical connections	ISO 4400	M12x1 (4-pin), metal	cable colour (DIN 47100)
Supply +	1	1	wh (white)
Supply -	2	2	bn (brown)
Signal + (for 3-wire)	3	3	gn (green)
Shield	ground pin \oplus	4	ye/gn (yellow / green)

Electrical connections (dimensions in mm)



² standard: 2 m PVC cable without ventilation tube (permissible temperatur: -5 ... 70 °C)
³ different cable types and lengths available, permissible temperatur depends on kind of cable

Mechanical connection (dimensions in mm)



⁴ other mechanical connections on request

Ordering code OEM 18.600G

9.12.2020

OEM 18.600G

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Input [bar]																					
0 ... 0,1	1	0	0	0	0																
0 ... 0,25	2	5	0	0	0																
0 ... 0,4	4	0	0	0	0																
0 ... 0,6	6	0	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																	
-1...0	X	1	0	2																	
Customer																					
Customer	9	9	9	9																	
Customer underpressure																					
Customer underpressure	X	X	X	X																	
Pressure																					
Gauge																					
Gauge																					R
Output																					
4 ... 20 mA / 2-wire																					
4 ... 20 mA / 2-wire																					1
0 ... 10 V / 3-wire																					
0 ... 10 V / 3-wire																					3
Customer																					
Customer																					9
Accuracy																					
0,50%																					5
0,5 % including Calibration Certificate																					T
1 % (underpressure ranges)																					8
Table of measured values for accuracy 0,5 %																					N
Customer																					9
Electrical connection																					
Connector DIN 43650 (ISO 4400) (IP 65)																					1 0 0
Cable gland PG7 / cable length specify (IP 67)																					4 0 0
+ PVC cable / 1 m																					
Connector M12 x 1, 4-pin (IP 67) - metal																					M 1 0
Cable outlet / cable length specify (IP 67) ¹																					T A 0
+ PVC cable / 1 m																					
Customer																					9 9 9
Mechanical connection																					
G 1/4" DIN 3852																					3 0 0
G 1/4" EN 837																					4 0 0
1/4" NPT																					N 4 0
Customer																					9 9 9
Seals																					
Viton (FKM)																					1
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;



BD SENSORS s.r.o.
Hradištská 817
CZ – 687 08 Buchlovice

Tel.: +420 572 411 011
Fax: +420 572 411 497

www.bdsensors.cz
info@bdsensors.cz

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



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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