

# 30.600 G

## OEM Pressure Transmitter Low Cost

### Applications

- ▶ mechanical and plant engineering
- ▶ general industrial applications

### Characteristics

- ▶ ceramic sensor
- ▶ accuracy 1 % span according to EN IEC 62828-2
- ▶ nominal pressure ranges from 0 ... 1.6 bar up to 0 ... 250 bar



### Technical Data

Input pressure range													
Nominal pressure gauge	[bar]	1.6	2.5	4	6	10	16	25	40	60	100	160	250
Overpressure	[bar]	5	5	12	12	20	50	50	120	120	200	400	400
Burst pressure ≥	[bar]	7	7,5	15	18	30	70	75	150	180	300	500	750
Vacuum resistance		unlimited											

Output signal / Supply	
Standard	2-wire: 4 ... 20 mA / $V_s = 8 \dots 32 V_{DC}$
Options	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 <sup>1</sup>	≤ ± 1 % 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 / k $\Omega$
Response time	2-wire: ≤ 10 msec 3-wire: ≤ 3 msec
Long term stability	≤ ± 0.3 % span / year at reference conditions
Measuring rate	1 kHz

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

Thermal effects (Offset and Span) / Permissible temperatures			
Thermal error	≤ ± 0.5 % span / 10 K (typ.)	in compensated range	-25 ... 85 °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 protection	emission and immunity according to EN 61326

Mechanical stability	
Vibration	10 g, 25 Hz ... 2 kHz      according to DIN EN 60068-2-6
Shock	500 g / 1 msec      according to DIN EN 60068-2-27

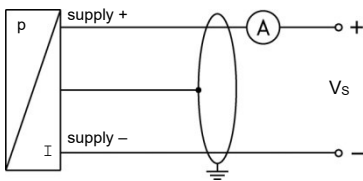


Materials	
Pressure port / housing	stainless steel 1.4301 (304)
Seals (media wetted)	FKM <span style="float: right;">others on request</span>
Diaphragm	ceramics Al <sub>2</sub> O <sub>3</sub> 96 %
Media wetted parts	pressure port, seals, diaphragm
Miscellaneous	
Weight	approx. 120 g
Current consumption	2-wire: max. 25 mA <span style="float: right;">3-wire ratiometric: typ. 1.5 mA</span> 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 <span style="float: right;">Pressure Equipment Directive: 2014/68/EU (module A) <sup>2</sup></span>

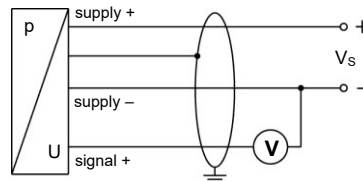
<sup>2</sup> This directive is only valid for devices with maximum permissible overpressure > 200 bar

### Wiring diagrams

2-wire-system (current)



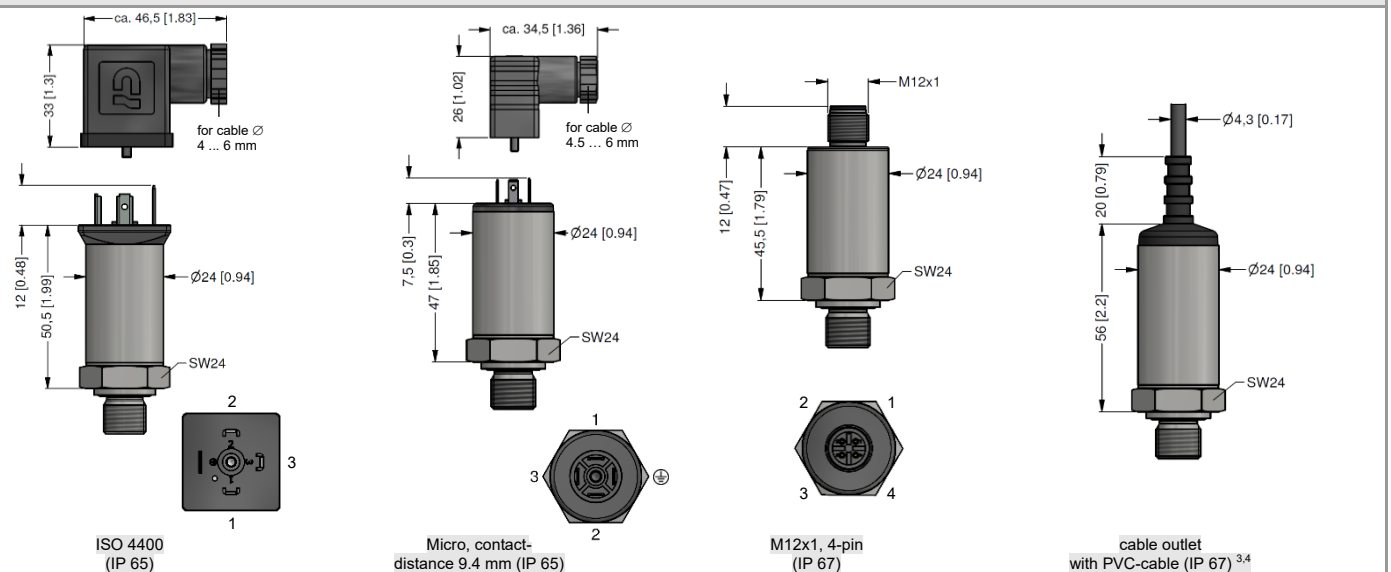
3-wire-system (voltage)



### Pin configuration

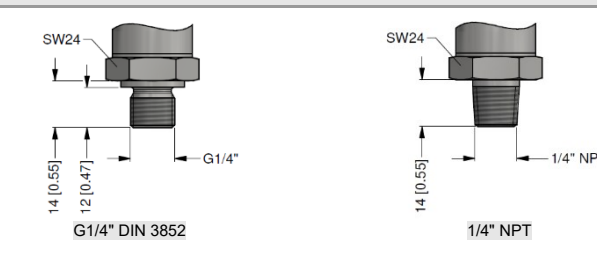
Electrical connection	ISO 4400	Micro (contact distance 9.4 mm)	M12x1 (4-pin), metal	cable colour (IEC 60757)
Supply +	1	1	1	wh (white)
Supply -	2	2	2	bn (brown)
Signal + (for 3-wire)	3	3	3	gn (green)
Shield	ground pin	ground pin	4	gn/ye (green / yellow)

### Electrical connections (dimensions in mm)



<sup>3</sup> standard: 2 m PVC cable without ventilation tube (permissible temperature: -5 ... 70 °C)  
<sup>4</sup> different cable types and lengths available, permissible temperature depends on kind of cable

### Mechanical connection (dimensions in mm)



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

Ordering code OEM 30.600G

23.08.2024

OEM 30.600G

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<b>Input [bar]</b>									
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					
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					
0 ... 100	1	0	0	3					
0 ... 160	1	6	0	3					
0 ... 250	2	5	0	3					
Customer	9	9	9	9					
Customer underpressure	X	X	X	X					
<b>Pressure</b>									
Gauge					R				
<b>Output</b>									
4 ... 20 mA / 2-wire					1				
0 ... 10 V / 3-wire					3				
1 ... 10 V / 3-wire					34				
0,5 ... 4,5 V / 3-wire					8				
10 ... 90 % Vs / 3-wire ratiometric (Vs = 2,7 ... 5 V DC)					R				
Customer					9				
<b>Accuracy</b>									
1 %					8				
1 % including Calibration Certificate					U				
Customer					9				
<b>Electrical connection</b>									
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)					M	0	0		
Connector M12 x 1, 4-pin (IP 67) - without plug					M	B	S		
Connector M12 x 1, 4-pin (IP 67) - metal					M	1	0		
Cable outlet / cable length specify (IP 67) <sup>1</sup>					T	A	0		
+ PVC cable / 1 m									
Customer					9	9	9		
<b>Mechanical connection</b>									
G 1/2" EN 837						2	0	0	
G 1/4" DIN 3852						3	0	0	
M 20 x 1,5 EN 837						8	0	0	
1/4" NPT						N	4	0	
G 1/8" DIN 3852						Z	3	7	
Customer						9	9	9	
<b>Housing type</b>									
Standard									2



Seals			
Viton (FKM)	1		
Customer	9		
Special version			
Standard		0	0
Oil and grease free		0	0
Oxygen application (PN ≤ 25 bar)		0	0
Customer		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.

