

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 ¹ | ≤ ± 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 / 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 | ≤ ± 0.5 % 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 |

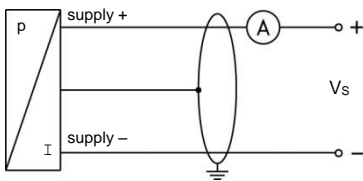


| Materials | |
|-------------------------|--|
| Pressure port / housing | stainless steel 1.4301 (304) |
| Seals (media wetted) | FKM others on request |
| Diaphragm | ceramics Al ₂ O ₃ 96 % |
| Media wetted parts | pressure port, seals, diaphragm |
| Miscellaneous | |
| Weight | approx. 120 g |
| Current 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 Pressure Equipment Directive: 2014/68/EU (module A) ² |

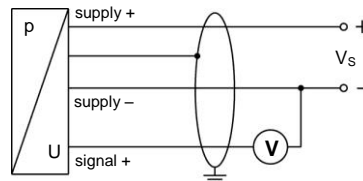
² This directive is only valid for devices with maximum permissible overpressure > 200 bar

Wiring diagrams

2-wire-system (current)



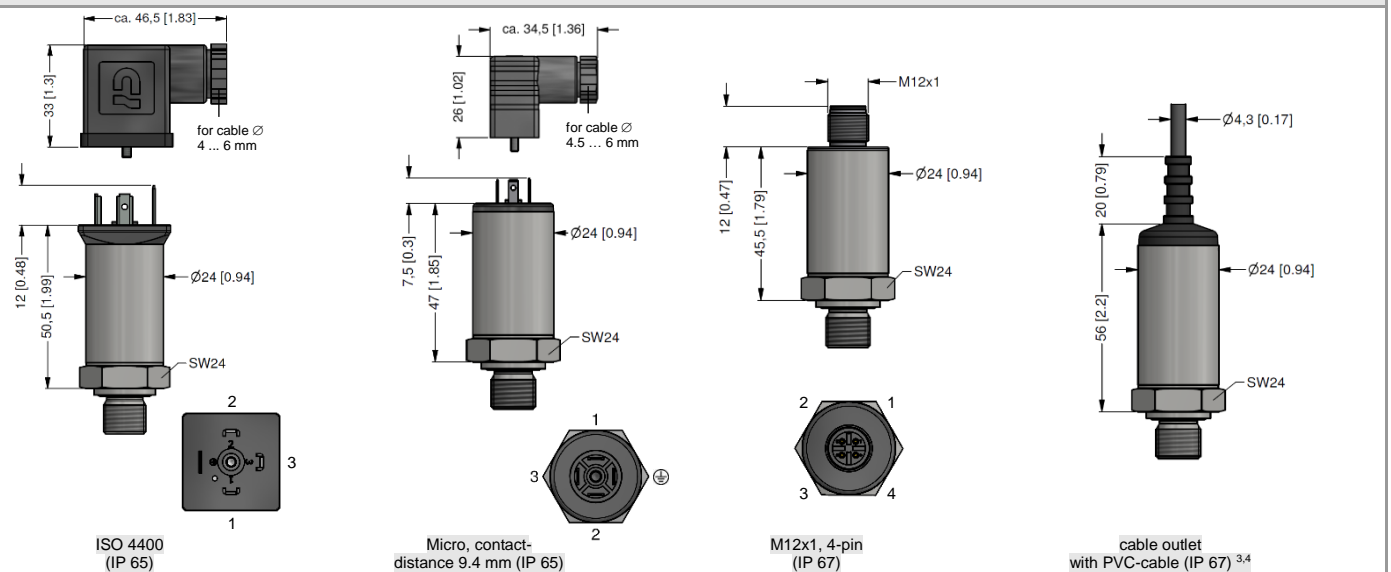
3-wire-system (voltage)



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) |

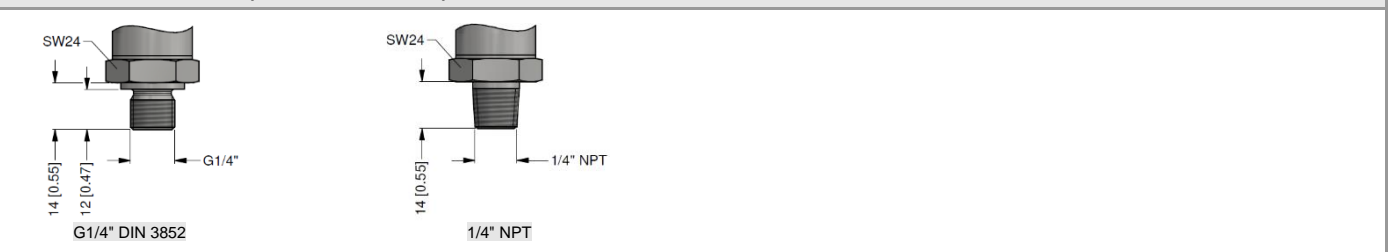
Electrical connections (dimensions in mm)



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)



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

Ordering code OEM 30.600G

9.12.2020

OEM 30.600G

□ □ □ □ - R - □ - □ - □ □ □ □ - □ □ □ □ - □ - □ - □ □ □ □

| Input [bar] | 1 | 6 | 0 | 1 | R | □ | □ | □ | □ | □ | □ | □ | □ | □ | □ | □ | |
|---|---|---|---|---|----|---|---|---|---|---|---|---|---|---|---|---|---|
| Input [bar] | | | | | | | | | | | | | | | | | |
| 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 | | | | | | | | | | | | | |
| Pressure | | | | | | | | | | | | | | | | | |
| Gauge | | | | | R | | | | | | | | | | | | |
| Output | | | | | | | | | | | | | | | | | |
| 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 | | | | | | | | | | | | |
| Accuracy | | | | | | | | | | | | | | | | | |
| 1 % | | | | | | | | | | 8 | | | | | | | |
| 1 % including Calibration Certificate | | | | | | | | | | U | | | | | | | |
| 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) | | | | | | | | | | M | 0 | 0 | | | | | |
| 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 1/2" EN 837 | | | | | | | | | | | | | | | 2 | 0 | 0 |
| G 1/4" DIN 3852 (only with seals "P") | | | | | | | | | | | | | | | 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 |
| Housing type | | | | | | | | | | | | | | | | | |



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

| | | | | |
|------------------------|---|---|---|---|
| Standard | 2 | | | |
| Seals | | | | |
| Viton (FKM) | 1 | | | |
| Customer | | | | |
| | 9 | | | |
| Special version | | | | |
| Standard | | 0 | 0 | 0 |
| Oil and grease free | | 0 | 0 | 8 |
| 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.



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