

# 26.600 G

## OEM Pressure Transmitter Standard

### Applications

- ▶ mechanical and plant engineering
- ▶ general industrial applications

### Characteristics

- ▶ ceramic sensor
- ▶ accuracy 0.5 % FSO according to IEC 60770
- ▶ nominal pressure ranges from 0 ... 1 bar up to 0 ... 400 bar
- ▶ option: oil and grease free version



### Technical Data



| Input pressure range         |                     |   |     |     |    |    |    |    |    |     |     |     |     |     |      |  |  |
|------------------------------|---------------------|---|-----|-----|----|----|----|----|----|-----|-----|-----|-----|-----|------|--|--|
| Nominal pressure gauge [bar] | -1...0 <sup>1</sup> | 1 | 1.6 | 2.5 | 4  | 6  | 10 | 16 | 25 | 40  | 60  | 100 | 160 | 250 | 400  |  |  |
| Nominal pressure abs. [bar]  | -                   | 1 | 1.6 | 2.5 | 4  | 6  | 10 | 16 | 25 | 40  | 60  | 100 | 160 | 250 | 400  |  |  |
| Overpressure [bar]           | 3                   | 3 | 5   | 5   | 12 | 12 | 20 | 50 | 50 | 120 | 120 | 200 | 400 | 400 | 650  |  |  |
| Burst pressure ≥ [bar]       | 4                   | 4 | 7   | 7,5 | 15 | 18 | 30 | 70 | 75 | 150 | 180 | 300 | 500 | 750 | 1000 |  |  |
| Vacuum resistance            | unlimited           |   |     |     |    |    |    |    |    |     |     |     |     |     |      |  |  |

<sup>1</sup> for this pressure range accuracy is ≤ 1 % FSO IEC 60770

| Output signal / Supply   |   |
|--|---|
| Standard   | 2-wire: 4 ... 20 mA / V <sub>S</sub> = 8 ... 32 V <sub>DC</sub>   |
| Options  | 3-wire: 0 ... 10 V / V <sub>S</sub> = 14 ... 30 V <sub>DC</sub><br>3-wire ratiometric: 10...90 % of V <sub>S</sub> / V <sub>S</sub> = 2.7...5 V <sub>DC</sub> |
| Performance  |   |
| Accuracy <sup>2</sup>  | ≤ ± 0.5 % FSO<br>for P <sub>N</sub> -1...0 bar: ≤ 1 % FSO   |
| Permissible load   | 2-wire: R <sub>max</sub> = [(V <sub>S</sub> - V <sub>S min</sub> ) / 0.02 A] Ω      3-wire: R <sub>min</sub> = 10 kΩ  |
| Influence effects  | supply: 0.05 % FSO / 10 V      load: 0.05 % FSO / kΩ  |
| Response time  | 2-wire: ≤ 10 msec      3-wire: ≤ 3 msec   |
| Long term stability  | ≤ ± 0.3 % FSO / year at reference conditions  |
| Measuring rate   | 1 kHz   |
| <sup>2</sup> accuracy according to IEC 60770 – limit point adjustment (non-linearity, hysteresis, repeatability) |   |
| Thermal effects (Offset and Span) / Permissible temperatures   |   |
| Thermal error  | ≤ ± 0.3 % FSO / 10 K      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  |

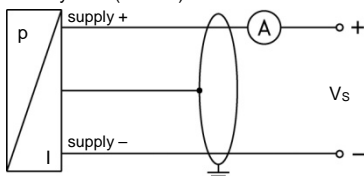


| Materials                 |   |
|---------------------------|---|
| Pressure port / housing   | stainless steel 1.4301 (304)  |
| Seals (media wetted)      | FKM others on request   |
| Diaphragm                 | ceramics Al <sub>2</sub> O <sub>3</sub> 96 %  |
| Media wetted parts        | pressure port, seals, diaphragm   |
| Miscellaneous             |   |
| Option oxygen application | for P <sub>N</sub> ≤ 15 bar: O-ring in 70 EPDM 281 (with BAM-approval); permissible maximum values are 15 bar / 60° C and 10 bar / 90° C<br>for P <sub>N</sub> ≤ 25 bar: O-ring in FKM Vi 567 (with BAM-approval); permissible maximum values are 25 bar / 150° C |
| Weight                    | approx. 120 g   |
| Current consumption       | 2-wire: max. 25 mA 3-wire ratiometric: typ. 1.5 mA<br>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) <sup>3</sup>  |

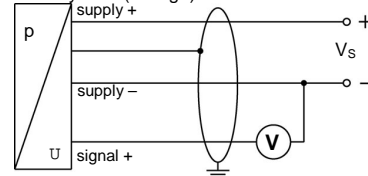
<sup>3</sup> This directive is only valid for devices with maximum permissible overpressure > 200 bar

### Wiring diagrams

2-wire-system (current)



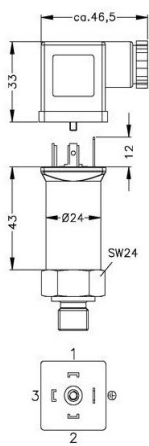
3-wire-system (voltage)



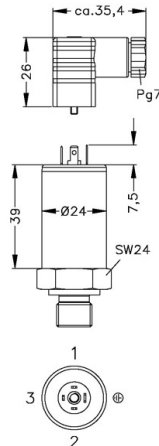
### Pin configuration

| Electrical connection | ISO 4400   | Micro (contact distance 9.4 mm) | M12x1 (4-pin), metal | cable colours (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)    |

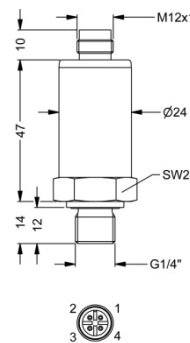
### Electrical connections (dimensions in mm)



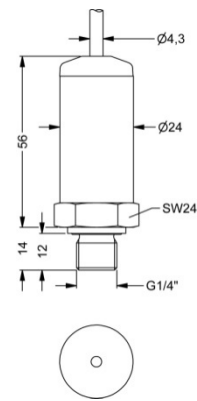
ISO 4400 (IP 65)



Micro, contact distance 9.4 mm (IP 65)



M12x1, 4-pin (IP 67)



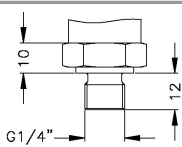
cable outlet with PVC-cable (IP 67) <sup>4,5</sup>

\* pressure range P<sub>N</sub> = 400 bar: total length increases by 12 mm.

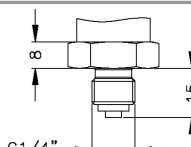
<sup>4</sup> standard: 2 m PVC cable without ventilation tube (permissible temperature: -5 ... 70 °C)

<sup>5</sup> different cable types and lengths available, permissible temperature depends on kind of cable

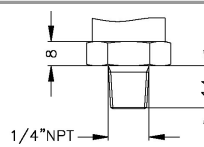
### Mechanical connection (dimensions in mm)



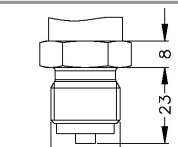
G1/4" DIN 3852



G1/4" EN 837



1/4" NPT



G1/2" EN 837

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