Pressure gauge per EN 837-1 with mounted diaphragm seal
With flange connection, internal diaphragm
Model DSS26M

Applications

- For aggressive, highly viscous, crystallising or hot media
- Process industry
- For small flange process connections

Special features

- Open flange with internal, all welded diaphragm with diaphragm bed
- No sealings and clamping elements
- Compact design

Description

Diaphragm seal systems are used to protect the pressure measuring instrument from aggressive, adhesive, crystallising, corrosive, highly viscous, environmentally hazardous or toxic media. The diaphragm made of stainless steel provides for the separation from the medium. The pressure is transmitted to the measuring instrument via the system fill fluid which is inside the diaphragm seal system.

Due to its design – with open flange connection and internal diaphragm with diaphragm bed – the DSS26M is suitable for all currently used standard flanges and is mounted to small process connections for pressure measurement.

Mounting of the diaphragm seal to the measuring instrument is made via direct mounting as standard.

The DSS26M is particularly well suited for aggressive, highly viscous, crystallising or hot media. The measuring system is successfully used worldwide in the chemical and petrochemical industries with high measuring requirements.
Specifications

Model DSS26M

<table>
<thead>
<tr>
<th>Design</th>
<th>Pressure gauge with Bourdon tube per EN 837-1, diaphragm seal with flange connection, internal diaphragm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal size (NG)</td>
<td>100</td>
</tr>
<tr>
<td>Accuracy class</td>
<td>1.0</td>
</tr>
</tbody>
</table>
| Pressure limitation | Steady: Full scale value  
Fluctuating: 0.9 x full scale value  
Short time: 1.3 x full scale value |
| Permissible temperature range | Medium: -10 ... +150 °C [14 ... 302 °F]  
Ambient: 10 ... 40 °C [50 ... 104 °F]  
Storage: 10 ... 60 °C [50 ... 140 °F] |
| Ingress protection | IP65 per IEC/EN 60529 |
| Material | Diaphragm seal: Stainless steel 1.4404 [316L]  
Diaphragm: Stainless steel 1.4435 [316L]  
Case: Stainless steel 1.4301 [304]  
Window: Laminated safety glass  
Dial, pointer: Aluminium |
| Level of cleanliness of wetted parts | Oil and grease free per ASTM G93-03 level F and ISO 15001 (< 1,000 mg/m²) |
| System fill fluid | Silicone oil KN 2 for general applications |

Scale ranges in bar [psi]

| Gauge pressure | 0 ... 6 [0 ... 100]  
0 ... 10 [0 ... 160]  
0 ... 16 [0 ... 200]  
0 ... 25 [0 ... 300]  
0 ... 40 [0 ... 600] |
|----------------|--------------------------------------------------|
| Vacuum and +/- scale range | -1 ... +5 [-30 inHg ... +70]  
-1 ... +9 [-30 inHg ... +130]  
-1 ... +10 [-30 inHg ... +145] |

Installation example, model DSS26M

Legend:
- NG Nominal size = 100 mm
- H Installation height
- D Outer diameter of diaphragm seal
- k Pitch circle diameter
- d4 Sealing face diameter
- b Flange thickness
- f Height of raised face
Dimensions in mm [in]

Legend:
NG Nominal size = 100 mm
H Installation height
Mb Effective diameter of diaphragm
D Outer diameter of diaphragm seal
b Flange thickness
d₂ Bore diameter
f Height of raised face
k Pitch circle diameter
G₁ Thread
d₄ Sealing face diameter
x Number of bores

Type of process connection: Flange connection following EN 1092-1
Sealing face: Form B1

<table>
<thead>
<tr>
<th>DN</th>
<th>PN</th>
<th>Dimensions in mm [in]</th>
<th>x</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>NG       H   Mb   D   b   f   k   d₂   d₄</td>
<td></td>
</tr>
</tbody>
</table>

Type of process connection: Flange connection following ASME B16.5
Sealing face: RF 125 ... 250 AA

<table>
<thead>
<tr>
<th>DN</th>
<th>Class</th>
<th>Dimensions in mm [in]</th>
<th>x</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>NG       H   Mb   D   b   f   k   d₂   d₄</td>
<td></td>
</tr>
<tr>
<td></td>
<td>300</td>
<td>40 [1,574] 95 [3,740]</td>
<td></td>
</tr>
<tr>
<td></td>
<td>300</td>
<td>88,9 [3,5] 19 [0,748]</td>
<td></td>
</tr>
</tbody>
</table>
Certificates (option)

3.1 inspection certificate per EN 10204 (e.g. material proof for wetted metallic parts, calibration certificate)

Approvals and certificates, see website

Ordering information

Scale range / Process connection (type of process connection, pipe standard, pipe dimension) / Material of wetted parts / Certificates