Bourdon tube pressure gauge
Stainless steel, safety version, high overpressure safety
Models 232.36, 233.36

Applications
- Especially suited for occasional short-duration overpressure loads of up to 4 times the measuring range
- Increased safety requirements
- With liquid-filled case for applications with high dynamic pressure loads or vibrations 1)
- For gaseous and liquid aggressive media that are not highly viscous or crystallising, also in aggressive ambience
- Process industry: Chemical, petrochemical, power plants, mining, on- and offshore, environmental technology, machine building and general plant construction

Special features
- High overpressure safety, overpressure range is indicated completely on scale
- Safety pressure gauge with solid baffle wall designed in compliance with operational safety requirements of EN 837-1
- All stainless steel construction

Description
Design
Safety pattern version following EN 837-1

Nominal size in mm
100, 160

Measuring ranges and overpressure ranges

<table>
<thead>
<tr>
<th>Measuring range in bar</th>
<th>Overpressure range up to ... bar</th>
</tr>
</thead>
<tbody>
<tr>
<td>-1 ... 0</td>
<td>3</td>
</tr>
<tr>
<td>0 ... 0.6</td>
<td>2.5</td>
</tr>
<tr>
<td>0 ... 1</td>
<td>4</td>
</tr>
<tr>
<td>0 ... 1.6</td>
<td>6</td>
</tr>
<tr>
<td>0 ... 2.5</td>
<td>10</td>
</tr>
<tr>
<td>0 ... 4</td>
<td>16</td>
</tr>
<tr>
<td>0 ... 6</td>
<td>25</td>
</tr>
<tr>
<td>0 ... 10</td>
<td>40</td>
</tr>
<tr>
<td>0 ... 16</td>
<td>60</td>
</tr>
<tr>
<td>0 ... 25</td>
<td>80</td>
</tr>
<tr>
<td>0 ... 40</td>
<td>100</td>
</tr>
</tbody>
</table>

1) Model 233.36

Accuracy class
Measuring range: 1.0
The measuring range end is marked by a triangle

Pressure limitation
Steady: end value of measuring range
Fluctuating: 0.9 x end value of measuring range
Short time: Overpressure range

Permissible temperature
Ambient: -40 ... +60°C without liquid filling
-20 ... +60 °C gauges with glycerine filling 1)
Medium: +200 °C maximum without liquid filling
+100 °C maximum with liquid filling 1)

Temperature effect
When the temperature of the measuring system deviates from the reference temperature (+20 °C):
max. ±0.4 % / 10 K of full scale value

Ingress protection
IP 65 per EN 60529 / IEC 60529
Standard version

Process connection
Stainless steel 316L, lower mount (LM)
G ½ B (male), 22 mm flats

Pressure element
Stainless steel 316L

Movement
Stainless steel

Dial
Aluminium, white, black lettering in measuring range,
overpressure range indicated by a black sector

Pointer
Aluminium, black

Case
Stainless steel, with solid baffle wall (Solidfront) and
blow-out back

Window
Laminated safety glass

Bezel ring
Cam ring (bayonet type), stainless steel

Filling liquid (for model 233.36)
Glycerine 99.7 %
(Glycerine 86.5 % for scale range ≤ 0 ... 2.5 bar)

Options

■ Other process connection
■ Sealings (model 910.17, see data sheet AC 09.08)
■ Assembly on diaphragm seals see product review
diaphragm seals
■ Other measuring ranges, for example -1 ... 1.5 bar
■ Surface mounting lugs on the back or panel mounting
flange, stainless steel
■ Ambient temperatures -40 °C: Silicone oil filling
■ Ingress protection IP 66 / IP 67
■ Switch contacts (for NS 100 only, data sheet AC 08.01)

CE conformity

ATEX directive 1)
Ignition protection type „c“; constructive safety

Approvals

■ EAC, import certificate, customs union Russia/Belarus/
Kazakhstan
■ GOST, metrology/measurement technology, Russia
■ CRN, safety (e.g. electr. safety, overpressure, ...), Canada
■ KOSHA, ignition protection type „i“ - intrinsic safety,
South Korea

Certificates 1)

■ 2.2 test report per EN 10204 (e.g. state-of-the-art
manufacturing, material proof, indication accuracy)
■ 3.1 inspection certificate per EN 10204 (e.g. indication
accuracy)

1) Option

Approvals and certificates, see website
Dimensions in mm

Standard version

Lower mount (LM)

<table>
<thead>
<tr>
<th>NS</th>
<th>Dimensions in mm</th>
<th>Weight in kg</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>a</td>
<td>b</td>
</tr>
<tr>
<td>100</td>
<td>25</td>
<td>59.5</td>
</tr>
<tr>
<td>160</td>
<td>27</td>
<td>65</td>
</tr>
</tbody>
</table>

Process connection per EN 837-1 / 7.3

Ordering information

Model / Nominal size / Measuring range / Connection size / Options