Bourdon tube pressure gauge, stainless steel
Compact version, NS 40, 50 and 63
Model 131.11

Applications
- For gaseous and liquid aggressive media that are not highly viscous or crystallising, also in aggressive environments
- Machine building and general plant construction
- Indication of failure alarm on gas cylinders
- CDA (clean dry air) applications

Special features
- Case and wetted parts from stainless steel
- Cost-effective and reliable
- Scale ranges from 0 ... 1 to 0 ... 1,000 bar

Description
The compact model 131.11 Bourdon tube pressure gauge is constructed with a case and wetted parts from stainless steel. The instrument meets the requirements of the international industry standard EN 837-1.

The modular design enables a multitude of combinations of process connections, nominal sizes and scale ranges. Due to this high variance, the instrument is suitable for use in a wide range of applications within industry.

The instrument is frequently used as a failure alarm indicator on gas cylinders. With its compact design and moderate purchase costs, the pressure gauge also qualifies for machine-building and plant-construction applications.

Due to the use of high-quality stainless steel materials and its robust design, the instrument is suitable for liquid and gaseous media, also in aggressive environments.

For mounting in control panels, the pressure gauges can be fitted with a surface mounting flange or with a triangular bezel and mounting bracket.
Description

Design
EN 837-1

Nominal size in mm
40, 50, 63

Accuracy class
2.5

Scale ranges
NS 40, 50: 0 ... 1 to 0 ... 600 bar
NS 63: 0 ... 1 to 0 ... 1,000 bar
or all other equivalent vacuum or combined pressure and vacuum ranges

Pressure limitation
Steady: 3/4 x full scale value
Fluctuating: 2/3 x full scale value
Short time: Full scale value

Permissible temperature
Ambient: -40 ... +60 °C
Medium: +100 °C maximum

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 per IEC/EN 60529
IP54

Process connection
Stainless steel 1.4571
Lower mount (radial) or centre back mount
G ¼ B (male), SW 14

Pressure element
Stainless steel 316L
C-type or helical type

Movement
Stainless steel

Dial
Aluminium, white, black lettering, with pointer stop pin

Pointer
Aluminium, black

Case
Stainless steel

Window
Polycarbonate, snap-fitted in case

Options

■ Other process connection
■ Sealings (model 910.17, see data sheet AC 09.08)
■ Diaphragm seal assembly
■ Slip-on bezel, stainless steel or polished stainless steel
■ Window from instrument glass or laminated safety glass (both only in combination with slip-on bezel)
■ Panel mounting flange, polished stainless steel (only for back mount connection)
■ Surface mounting flange (NS 63)
■ Triangular bezel, polished stainless steel, with clamp (only for back mount connection)

Special versions

Measuring instruments for ammonia plants (NS 63)
With temperature scale for refrigerant R 717 (NH3) in °C, scale ranges: -1 ... 0 ... 15 bar or -1 ... 0 ... 26 bar
Approvals

<table>
<thead>
<tr>
<th>Logo</th>
<th>Description</th>
<th>Country</th>
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</table>
| CE   | EU declaration of conformity  
Pressure equipment directive  
PS > 200 bar, module A, pressure accessory | European Union |
| EAC  | EAC (option)  
Pressure equipment directive | Eurasian Economic Community |
| GOST | GOST (option)  
Metrology, measurement technology | Russia |
| -    | KazlnMetr (option)  
Metrology, measurement technology | Kazakhstan |
| -    | MTSCHS (option)  
Permission for commissioning | Kazakhstan |
| GOST | BelGIM (option)  
Metrology, measurement technology | Belarus |
| UkrSEPRO | UkrSEPRO (option)  
Metrology, measurement technology | Ukraine |
| Uzstandard | Uzstandard (option)  
Metrology, measurement technology | Uzbekistan |
| CPA  | CPA | China |
| CRN  | CRN  
Safety (e.g. electr. safety, overpressure, ...) | Canada |
| KBA  | KBA (option)  
Automotive | European Union |

Certificates (option)

- 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)

Approvals and certificates, see website
Dimensions in mm

Standard version

Lower mount (radial)

Centre back mount

<table>
<thead>
<tr>
<th>NS</th>
<th>Dimensions in mm</th>
<th>Weight in kg</th>
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<tbody>
<tr>
<td></td>
<td>a</td>
<td>b₁ ±1</td>
</tr>
<tr>
<td>40</td>
<td>9</td>
<td>28</td>
</tr>
<tr>
<td>50</td>
<td>9.6</td>
<td>28</td>
</tr>
<tr>
<td>63</td>
<td>10</td>
<td>28</td>
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</tbody>
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Process connection per EN 837-1 / 7.3

Ordering information

Model / Nominal size / Scale range / Process connection / Connection location / Options

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