Bourdon tube pressure gauge, copper alloy or stainless steel  
Edgewise panel design  
Models 214.11, 234.11

Applications

- For gaseous and liquid media that are not highly viscous or crystallising and will not attack copper alloy parts
- Model 214.11: Measuring system copper alloy
  Model 234.11: Measuring system stainless steel, also for aggressive media

Special features

- Built-in case per DIN 43700
- Nominal sizes NS 96 x 96 and NS 72 x 72 available
- Ingress protection IP42

Description

The models 214.11 and 234.11 have been specifically designed for panel mounting and therefore feature a back mount process connection. With their outer dimensions of 96 x 96 mm and 72 x 72 mm in accordance with DIN 43700, the instruments can be installed in corresponding control cabinets and operator panels without any need for adaptation.

Panel mounting is simply carried out using two clamping brackets directly screwed to the case.

The instruments are based on the proven Bourdon tube measuring system. On pressurisation, the deflection of the Bourdon tube, proportional to the incident pressure, is transmitted to the movement via a link and indicated.

The wetted parts of model 214.11 are made of a copper alloy, those of model 234.11 are made of stainless steel.
Specifications

Design
DIN 43700

Nominal size in mm
96 x 96, 72 x 72

Accuracy class
NS 96 x 96: Class 1.0
NS 72 x 72, 96 x 96: Class 1.6

Scale ranges
NS 96 x 96: 0 ... 0.6 to 0 ... 1,000 bar
NS 72 x 72: 0 ... 0.6 to 0 ... 400 bar
or all other equivalent vacuum or combined pressure and vacuum ranges

Permissible temperature
Ambient: -20 ... +60 °C
Medium: +60 °C maximum (soft soldered)
+100 °C maximum (brazed)

Pressure limitation
- NS 96 x 96
  Steady: Full scale value
  Fluctuating: 0.9 x full scale value
  Short time: 1.3 x full scale value
- NS 72 x 72
  Steady: 3/4 x full scale value
  Fluctuating: 2/3 x full scale value
  Short time: Full scale value

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
IP42 per EN/IEC 60529

Process connection
Copper alloy (> 100 bar stainless steel 316L)
Connection location:
- Centre back mount
- Lower back mount (only NS 96 x 96)

NS 96 x 96: G ½ B (male), SW 22
NS 72 x 72: G ¼ B (male), SW 14

Pressure element
< 100 bar: Copper alloy, C-type, soft soldered
≥ 100 bar: Stainless steel 316L, helical or spiral type, brazed

Movement
Copper alloy, wear parts argentan

Dial
Aluminium, white, black lettering
NS 72 x 72 and 96 x 96 with pointer stop pin

Pointer
Aluminium, black

Case / Chassis (DIN 43700)
Steel, galvanised

Basic case
Plastic

Window
Instrument glass

Panel frame
Steel, black, narrow, snap-fit

Options
- Other process connection
- Measuring system stainless steel 316L (model 234.11)
- Duplex measuring system max. 60 bar
- Wide panel frame
## Approvals

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## 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)
### Dimensions in mm

<table>
<thead>
<tr>
<th>NS, connection location</th>
<th>Dimensions in mm</th>
<th>Weight in kg</th>
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</thead>
<tbody>
<tr>
<td>96 x 96, lower back mount</td>
<td>b₁  73  e  6  f  30 G ½ B  L  96  l  79 p□  88.5 SW  22</td>
<td>0.60</td>
</tr>
<tr>
<td>96 x 96, centre back mount</td>
<td>35  47  6  -  96  79  88.5  14</td>
<td>0.60</td>
</tr>
<tr>
<td>72 x 72, centre back mount</td>
<td>29  42  6  -  72  57  66  14</td>
<td>0.30</td>
</tr>
</tbody>
</table>

Process connection per EN 837-1 / 7.3

### Ordering information

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