Test gauge, copper alloy or stainless steel
Class 0.6, NS 250
Models 311.11, 331.11

Applications
- For gaseous and liquid media that are not highly viscous or crystallising
- Model 311.11: Measuring system copper alloy
  Model 331.11: Measuring system stainless steel, also for aggressive media
- Precision measurement in laboratories
- High-accuracy pressure measurement
- Testing of industrial type pressure gauges

Special features
- Knife edge pointer for optimal accuracy of reading
- Precise movement with wear parts of argentan
- Particularly easy-to-read scale due to nominal size 250
- Scale ranges up to 0 … 1,600 bar

Description

Design
EN 837-1

Nominal size in mm
250

Accuracy class
0.6

Scale ranges
Model 311.11: 0 … 0.6 to 0 … 600 bar
Model 331.11: 0 … 0.6 to 0 … 1,600 bar
or all other equivalent vacuum or combined pressure and vacuum ranges

Adjustment medium
≤ 25 bar: Gas
> 25 bar: Liquid

Pressure limitation
Steady: Full scale value
Fluctuating: 0.9 x full scale value
Short time: 1.3 x full scale value

Permissible temperature
Ambient: -40 ... +60 °C
Medium: +80 °C maximum (model 311.11)
+200 °C maximum (model 331.11)

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
IP54 per IEC/EN 60529

Data sheets showing similar products:
Test gauge, copper alloy, NS 160 [6”]; model 312.20; see data sheet PM 03.01
Standard version

Process connection
Model 311.11: Copper alloy
Model 331.11: Stainless steel
Lower mount (radial) or lower back mount
G ½ B (male), SW 22

Pressure element
Model 311.11:
< 100 bar: Copper alloy
≥ 100 bar: Stainless steel 316L
≥ 1,000 bar: Ni-Fe alloy
Model 331.11: Stainless steel 316L

Movement
Copper alloy, wear parts argentan

Dial
Aluminium, white, black lettering

Pointer
Knife edge pointer, aluminium, black

Case
Steel, black

Window
Instrument glass

Bezel ring
Slip-on bezel, steel, black

Options
- Other process connection
- Window from laminated safety glass or clear non-splintering plastic
- Panel mounting flange, steel, black
- Higher indication accuracy: Class 0.25 per EN 837 or grade 3A per ASME B 40.1 for scale ranges ≤ 400 bar
- Adjustment medium gas from scale range ≥ 25 bar

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. material proof for wetted metallic parts, indication accuracy)
- PCA calibration certificate, traceable and accredited in accordance with ISO/IEC 17025
- Calibration certificate by the national accreditation body, traceable and accredited in accordance with ISO/IEC 17025 on request

Approvals and certificates, see website
Dimensions in mm

Standard version

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<th>NS</th>
<th>Dimensions in mm</th>
<th>Weight in kg</th>
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<tr>
<td>250</td>
<td>17 51.5 83.5 250 50</td>
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Process connection per EN 837-1 / 7.3
1) Plus 13 mm with scale ranges ≥ 100 bar

Ordering information

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