Diaphragm pressure gauge for the process industry
Model 432.56, high overload safety up to 100 bar
Model 432.36, safety version, high overload safety up to 400 bar

Applications

■ For measuring points with increased overload
■ For gaseous, liquid and aggressive media, also in aggressive ambience
■ With the open connecting flange option also for contaminated and viscous media
■ Process industry: Chemical, petrochemical, power plants, mining, on-/offshore, environmental technology, machine building and general plant construction

Special features

■ High overload safety, optionally 40, 100 or 400 bar, due to metallic diaphragm cushion, without liquid-filled measuring cell
■ Wide choice of special materials
■ Compatible with switch contacts
■ All stainless steel construction
■ Scale ranges from 0 … 16 mbar

Description

Design
EN 837-3

Nominal size in mm
100, 160

Accuracy class
1.6

Scale ranges 1)
0 … 16 mbar to 0 … 250 mbar
0 … 400 mbar to 0 … 40 bar
or all other equivalent vacuum or combined pressure and vacuum ranges

Pressure limitation
Steady: Full scale value
Fluctuating: 0.9 x full scale value

Overload safety 1)
■ 40 bar
■ 100 bar
■ 400 bar (only for scale ranges ≥ 0 … 400 mbar 2)

Permissible temperature
Ambient: -20 … +60 °C
Medium: ≤ 100 °C

Temperature effect
When the temperature of the measuring system deviates from the reference temperature (+20 °C): ≤ ±0.8 %/10 K of full scale value

Ingress protection per IEC/EN 60529
■ IP54
■ IP65 for models with liquid filling

1) Depending on scale range and overload safety, different flange Ø apply.
2) 400 bar overload safety for scale ranges < 400 mbar on request

Data sheets showing similar products:
Stainless steel version; models 432.50, 433.50; see data sheet PM 04.03
Standard version

Process connection with lower measuring flange
Stainless steel, G ½ B (male)

Pressure element
≤ 0.25 bar: Stainless steel
> 0.25 bar: NiCr-alloy (Inconel)

Pressure chamber sealing
FPM/FKM

Movement
Stainless steel

Dial
Aluminium, white, black lettering

Pointer
- Adjustable pointer, aluminium, black
- Standard pointer, aluminium, black (for models with liquid filling)

Case
Stainless steel, instruments with liquid filling with compensating valve to vent case
Model 432.56: With blow-out device
Model 432.36: Safety version with solid baffle wall (Solid-front) and blow-out back

Upper measuring flange and flange connecting screws
Stainless steel

Window
Laminated safety glass

Bezel ring
Bayonet ring, stainless steel

Options

- Other process connection
- Sealings (model 910.17, see data sheet AC 09.08)
- Liquid filling (models 433.56, 433.36, ingress protection IP65)
- Vacuum safe to -1 bar
- Max. medium temperature +200 °C
- Permissible ambient temperature -40 ... +60 °C (silicone oil filling)
- Higher indication accuracy, class 1.0
- Open connecting flanges per DIN/ASME, DN 15 to DN 80 (preferred nominal widths DN 25 and 50 or DN 1" and 2" per data sheet IN 00.10)
- Wetted parts made of special materials, high overload safety up to 10 bar (flange Ø 160 mm) or 40 bar (flange Ø 100 mm): PTFE (models 452.56, 452.36), Hastelloy, Monel, nickel, tantalum, titanium (accuracy class 2.5)
- Additional wall bracket for model 432.36, high overload safety up to 400 bar ¹)
- Diaphragm pressure gauge with switch contacts, see data sheet PV 24.07
- Diaphragm pressure gauge with electrical output signal, see model PGT43HP, data sheet PV 14.07

¹) Recommendation with vibration load > 0.5 g
## Approvals

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<th>Country</th>
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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)
- Others on request

Approvals and certificates, see website
### Dimensions in mm

**Standard version**

<table>
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<tr>
<th>NS</th>
<th>Scale ranges in bar</th>
<th>Overload safety up to ... bar</th>
<th>Dimensions in mm</th>
<th>Weight in kg</th>
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Process connection per EN 837-3 / 7.3