Capsule Pressure Gauges Stainless Steel Series, High Overpressure Safety Model 632.51

WIKA Data Sheet PM 06.06



Applications

- Pressure measurement at very low pressures
- For gaseous, aggressive media, also in aggressive ambience
- Robust design and ingress protection IP 54, suitable for outdoor use
- Suitable for use with alarm contacts

Special Features

- High overpressure safety up to 50 x full scale value
- Measuring chamber protected against unauthorised intervention
- Minimal measuring error and influence on function from pressure medium pollution



Capsule Pressure Gauge, Model 632.51

Description

Nominal size in mm 100, 160

Accuracy class 1.6

Scale ranges

0 ... 2.5 to 0 ... 100 mbar or all other equivalent vacuum or combined pressure and vacuum ranges

Pressure limitation

Steady: full scale value Fluctuating: 0.9 x full scale value **Overpressure safety** 50 x full scale value, max. 7 bar

Operating temperature Ambient: -20 ... +60 °C Medium: +100 °C maximum

Temperature effect

When the temperature of the measuring system deviates from the reference temperature (+20 °C): max. ± 0.6 %/10 K of full scale value

Ingress protection

IP 54 per EN 60 529 / IEC 529

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Standard version

Process connection (wetted)

Stainless steel 1.4571 Lower mount (LM) G ½ B (male), 22 mm flats

Pressure element (wetted)

Stainless steel 1.4571

Measuring chamber (wetted)

Stainless steel 1.4571

Sealing (wetted) PTFE

Movement

Stainless steel

Dial Aluminium, white, black lettering

Pointer Adjustable pointer, aluminium, black

Zero adjustment

By means of adjustable pointer (adjustment appliance with gauges with alarm contacts)

Case Stainless steel, with pressure vent in the back of the case

Window

Laminated safety glass

Bezel ring

Cam ring (bayonet type), stainless steel

Mounting by means of:

- Rigid tailpipes
- Mounting bracket for wall or pipe mounting (option)
- Mounting flange (option)

Options

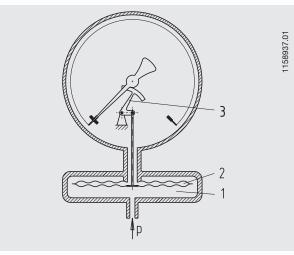
- Other process connection
- Mounting bracket for wall or pipe mounting (data sheet AC 09.07)
- Panel or surface mounting flange (observe measuring chamber!)
- Indication accuracy class 0.6 or 1.0¹⁾
- Higher overpressure safety ¹⁾
- Alarm contacts (data sheet AC 08.01)
- Pressure gauge with electrical output signal, see model PGT63HP.100/160, data sheet PV 16.06

1) After feasibility test

Design and operating principle

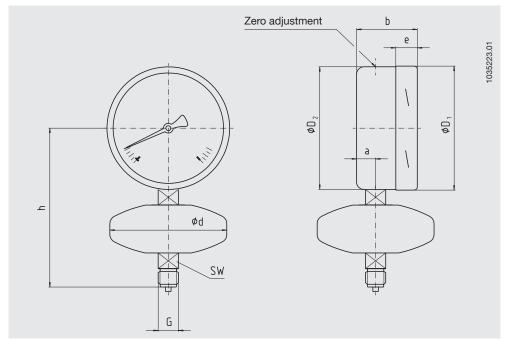
Illustration of the principle

- Pressure-sealed measuring chamber (1) with capsule measuring element
- The capsule element (2) is pressurised from outside and moves in strokes (deflection)
- The deflection is transmitted to the movement (3) and indicated
- The overpressure safety is achieved through the mutually supporting surfaces of both halves of the capsule element.



Dimensions in mm

Standard version



| NS | Dimensions in mm | | | | | | | | | Weight in kg |
|-----|------------------|------|------------|-----|-----|------|-------|-------|----|--------------|
| | а | b | D 1 | D2 | d | е | G | h ± 1 | SW | |
| 100 | 15.5 | 49.5 | 101 | 99 | 133 | 17.5 | G ½ B | 170 | 22 | 1.6 |
| 160 | 15.5 | 49.5 | 161 | 159 | 133 | 17.5 | G ½ B | 200 | 22 | 2.1 |

Process connection per EN 837-3/7.3

Ordering information

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

Modifications may take place and materials specified may be replaced by others without prior notice. Specifications and dimensions given in this leaflet represent the state of engineering at the time of printing.

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