

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. $\pm 0.6 \%$ /10 K of full scale value

Ingress protection
IP 54 per EN 60 529 / IEC 529

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 1.0 ¹⁾
- 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

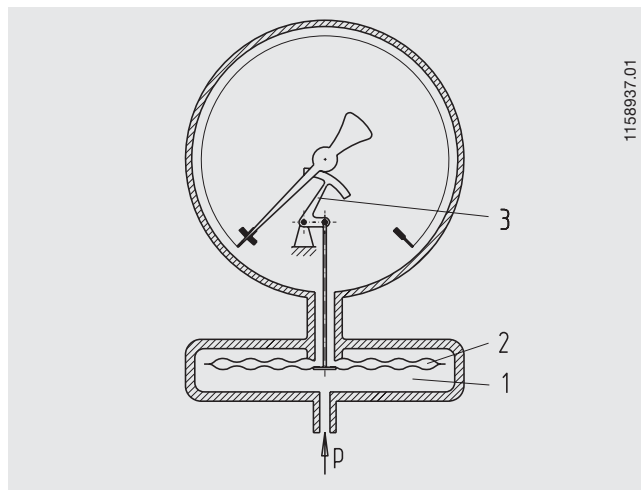
1) After feasibility test



Design and operating principle

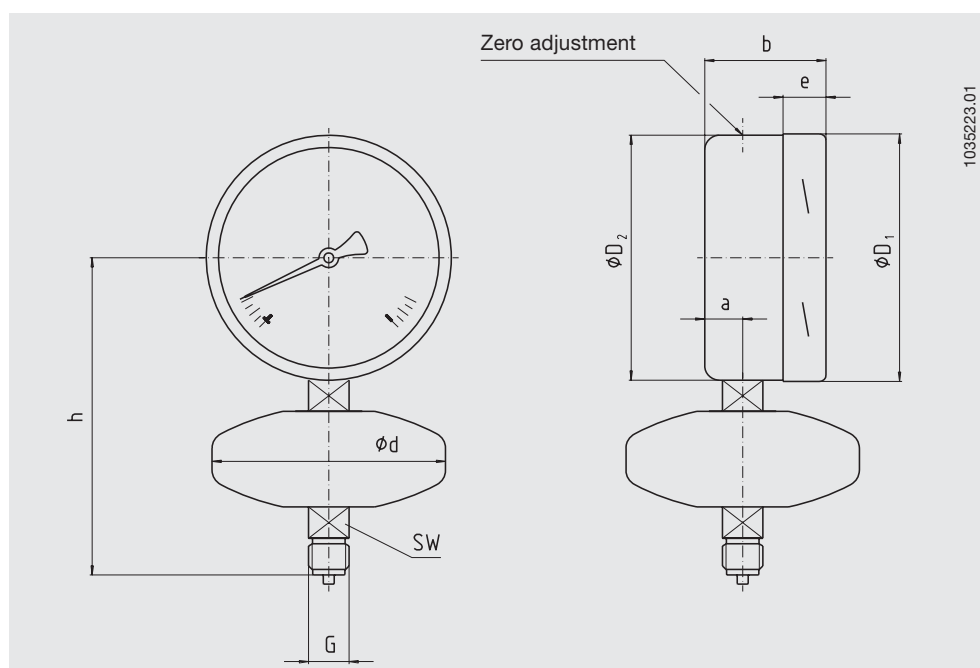
- Pressure-sealed measuring chamber (1) with capsule measuring element
- The capsule element (2) is pressurised from outside and moves in strokes (deflection)
- The deflection is transmitted to the movement (3) and indicated
- The overpressure safety is achieved through the mutually supporting surfaces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

Illustration of the principle



Dimensions in mm

Standard version



NS	Dimensions in mm									Weight in kg
	a	b	D ₁	D ₂	d	e	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