

# Capsule pressure gauge

## Stainless steel version, high overpressure safety

### Model 632.51

WIKAI 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

#### Special features

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

##### Permissible 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 60529 / IEC 529

## Standard version

### Process connection (wetted)

Stainless steel 1.4571,  
lower mount,  
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

### Case

Stainless steel, with blow-out device

### Window

Laminated safety glass

### Bezel ring

Cam ring (bayonet type), stainless steel

### Mounting by means of:

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

## Options

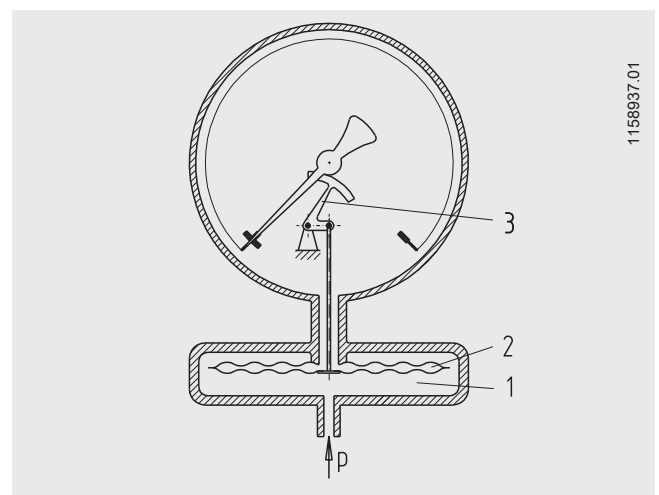
- Other process connection
- Sealings (model 910.17, see data sheet AC 09.08)
- Mounting bracket for wall or pipe mounting (data sheet AC 09.07)
- Panel or surface mounting flange (observe measuring chamber!)
- Indication accuracy class 0.6 or 1.0<sup>1)</sup>
- Higher overpressure safety<sup>1)</sup>
- Pressure gauge with switch contacts, see data sheet PV 26.06
- Pressure gauge with electrical output signal, see model PGT63HP, data sheet PV 16.06

1) After feasibility test

## Design and operating principle

- Pressure-sealed measuring chamber (1) with capsule pressure 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

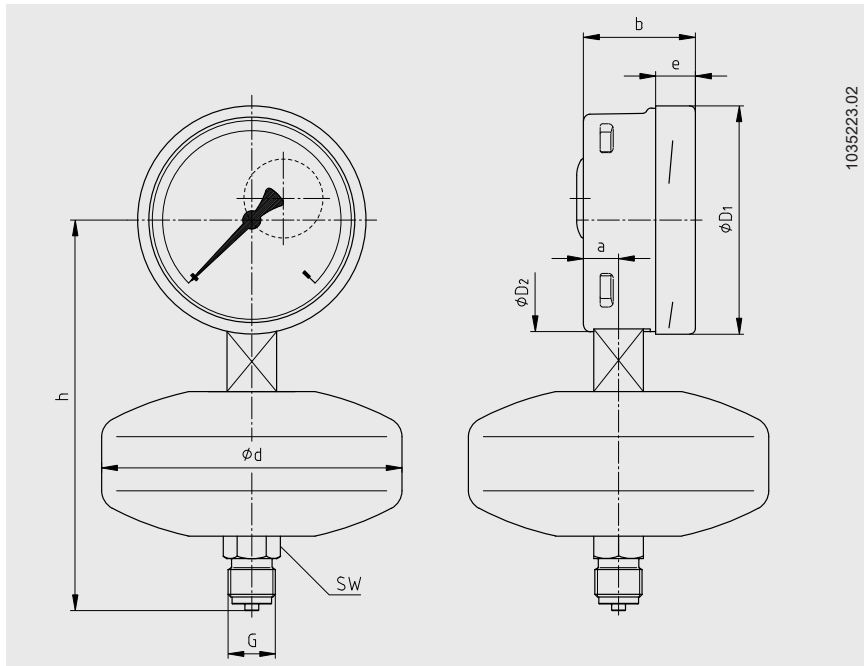
## Illustration of the principle



1158937.01

## Dimensions in mm

### Standard version



NS	Dimensions in mm							G	h ±1	SW	Weight in kg
	a	b	D <sub>1</sub>	D <sub>2</sub>	d	e					
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

### CE conformity

#### ATEX directive

94/9/EC, II 2 GD c TX

### Approvals

- **GOST**, metrology/measurement technology, Russia
- **GOST-R**, import certificate, Russia

### Certificates

- 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 wetted parts metal component, indication accuracy)

1) Option

Approvals and certificates, see website

### Ordering information

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

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