

# Diaphragm Pressure Gauges Industrial Series, Stainless Steel Case Model 422.20/423.20, without/with Liquid Filling

WIKA Data Sheet PM 04.08

## Applications

- For measuring points with increased overload
- With liquid filled case for applications with high dynamic pressure pulsations or vibrations
- Suitable for all gaseous and liquid, high-viscosity or solids entrained media
- For capital goods and extractive industries

## Special Features

- As a standard 3 or 5 times overpressure safety
- Compatible with alarm contacts and transmitters
- Optional: pressure connection with flange
- Scale ranges from 0 ... 16 mbar



**Diaphragm Pressure Gauge Model 422.20**

## Description

### Design

EN 837-3

### Nominal size

100 and 160 mm

### Accuracy class

1.6

### Scale ranges

0 ... 16 mbar to 0 ... 250 mbar (flange Ø 160 mm)  
0 ... 400 mbar to 0 ... 40 bar (flange Ø 100 mm)  
or other equivalent units of pressure or vacuum

### Working pressure

Steady: full scale value  
Fluctuating: 0.9 x full scale value

### Overpressure safety

≤ 0.25 bar: 5 x full scale value  
> 0.25 to ≤ 2.5 bar: 3 x full scale value  
> 2.5 bar: 5 x full scale value, 40 bar maximum

### Operating temperature

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

### Temperature effect

When temperature of the pressure element deviates from reference temperature (+20 °C):  
max. ±0.8 %/10 K of true scale value

### Ingress protection

IP 54 per EN 60 529 / IEC 529  
(with liquid filling IP 65)

## Standard features

### Pressure connection and lower diaphragm housing

Material: black carbon steel

Lower mount (LM) G ½ B (male), 27 mm flats

### Pressure element

Material: stainless steel

### Diaphragm sealing ring

NBR (Buna rubber)

### Upper diaphragm housing

Stainless steel

### Movement

Material: Cu-alloy, wear parts argantan

### Dial

White aluminium with black lettering

### Pointer

Black aluminium pointer

### Case

Stainless steel

### Window

Instrument glass

### Bezel ring

Cam ring (bayonet type), stainless steel

### Liquid filling (for model 423.20)

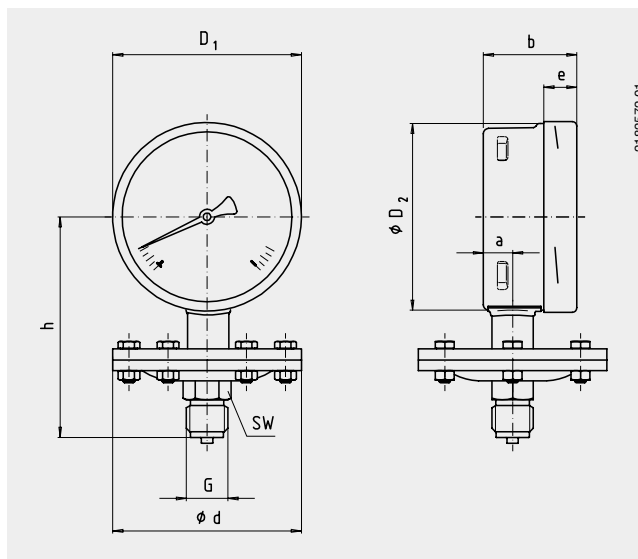
Glycerine 86.5 %

## Optional extras

- Other pressure connections
- 10 x overpressure safe, maximum 40 bar
- Vacuum safe up to -1 bar
- Pressure connection with DIN or ASME flange DN 15 to DN 80 (preferably DN 25, DN 50 or DN 1", DN 2" see data sheet IN 00.10)
- Alarm contacts (see data sheet AC 08.01), liquid filled: insulating oil
- Transmitter (see data sheet AE 08.02)

## Dimensions in mm

### Standard version



NS	Pressure range in bar	Dimensions in mm			D <sub>1</sub>	D <sub>2</sub>	e	G	h ± 2	SW	Weight in kg
		d	a	b							
100	≤ 0.25	160	15.5	49.5	101	99	17.5	G ½ B	117	27	2.50
160	≤ 0.25	160	15.5	49.5	161	159	17.5	G ½ B	149	27	2.90
100	> 0.25	100	15.5	49.5	101	99	17.5	G ½ B	117	27	1.30
160	> 0.25	100	15.5	49.5	161	159	17.5	G ½ B	147	27	1.70

Standard pressure entry with parallel thread and sealing to EN 837-3 / 7.3

## Ordering information

Pressure gauge model / Nominal size / Scale range / Size and location of connection / Optional extras required

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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