

# Diaphragm pressure gauge Industrial series, grey cast iron Models 422.12, 423.12

WIKA data sheet PM 04.02



for further approvals  
see page 3

## Applications

- For measuring points with increased overpressure
- With liquid-filled case for applications with high dynamic pressure loads or vibrations<sup>1)</sup>
- For gaseous and liquid media, with the open connecting flange option also for particulates-containing and viscous media
- For mining, environmental technology, machine building and general plant construction

## Special features

- Compatible with switch contacts
- Process connection thread or open flange
- Scale ranges from 0 ... 16 mbar



Diaphragm pressure gauge model 422.12

## Description

### Design

EN 837-3

### Nominal size in mm

100, 160

### Accuracy class

Model 422.12: 1.6

Model 423.12: 2.5 (option 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 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

3 x full scale value, however max. 40 bar

### Permissible temperature

Ambient: -20 ... +60 °C

Medium: +100 °C maximum

Storage: -40 ... +70 °C (scale ranges ≤ 60 mbar:

-20 ... +70 °C)

### Temperature effect

When the temperature of the measuring system deviates from the reference temperature (+20 °C):

max. ±0.8 %/10 K of full scale value

### Ingress protection

IP 54 per EN 60529 / IEC 60529

(with liquid filling<sup>1)</sup> IP 65)

<sup>1)</sup> Model 423.12

## Standard version

### Process connection with lower measuring flange

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

### Pressure element

≤ 2.5 bar: Stainless steel 1.4571

> 2.5 bar: Stainless steel 1.4568

### Pressure chamber sealing

NBR

### Movement

Cu-alloy, wear parts argentan

### Dial

Aluminium, white, black lettering

### Pointer

Aluminium, black

### Case with upper measuring flange

Grey cast iron, black

### Window

Instrument glass

### Bezel ring

Cam ring (bayonet type), stainless steel, black

### Filling liquid <sup>2)</sup> (for model 423.12)

Glycerine 86.5 %

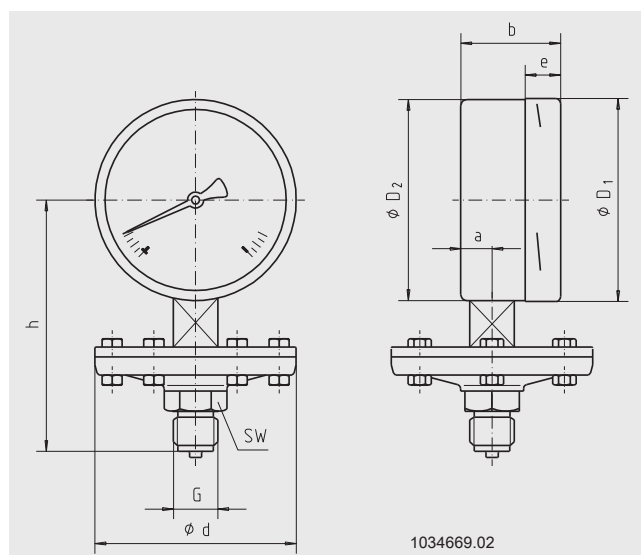
<sup>2)</sup> Accuracy class 2.5

## Options

- Other process connection
- Sealings (model 910.17, see data sheet AC 09.08)
- Wetted parts made of stainless steel, pressure chamber sealing FPM/FKM (model 432.12)
- Overpressure safety: 10 x full scale value, max. 40 bar
- Vacuum safe up to -1 bar
- Open connecting flanges per DIN/ASME from DN 15 to DN 80 (preferred nominal widths DN 25 and 50 or DN 1" and 2" per data sheet IN 00.10)
- Pressure element > 2.5 bar: NiCr-alloy (Inconel)
- Switch contacts <sup>2)</sup> (see data sheet AC 08.01)

## Dimensions in mm

### Standard version



NS	Scale range in bar	Dimensions in mm								Weight	
		d	a	b	D <sub>1</sub>	D <sub>2</sub>	e	G	h ±2	SW	in kg
100	≤ 0.25	160	15.5	49.5	101	99	17.5	G ½ B	135	27	3.4
160	≤ 0.25	160	15.5	49.5	161	159	17.5	G ½ B	165	27	4.3
100	> 0.25	100	15.5	49.5	101	99	17.5	G ½ B	135	27	2.1
160	> 0.25	100	15.5	49.5	161	159	17.5	G ½ B	165	27	3.0

Process connection per EN 837-3 / 7.3.

## Approvals

- **GOST**, metrology/measurement technology, Russia
- **GOST-R**, import certificate, Russia
- **CRN**, safety (e.g. electr. safety, overpressure, ...), Canada

## Certificates <sup>1)</sup>

- 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

© 2008 WIKA Alexander Wiegand SE & Co. KG, all rights reserved.  
The specifications given in this document represent the state of engineering at the time of publishing.  
We reserve the right to make modifications to the specifications and materials.