

# 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 1/2 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 %

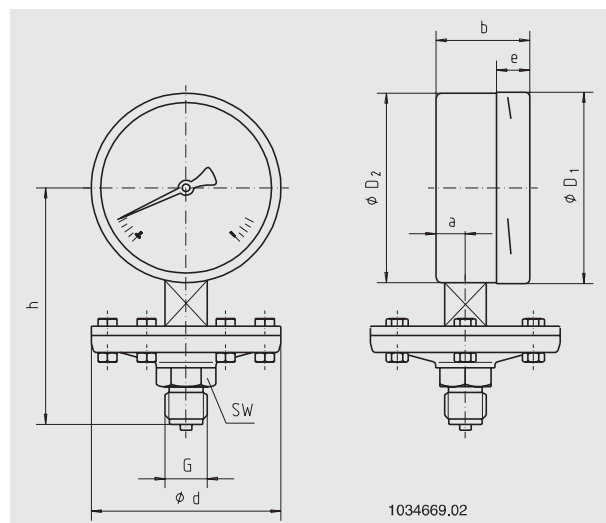
<sup>2)</sup> Accuracy class 2.5

## 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	Dimensions in mm									Weight
	in bar	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 1/2 B	135	27	3.4
160	≤ 0.25	160	15.5	49.5	161	159	17.5	G 1/2 B	165	27	4.3
100	> 0.25	100	15.5	49.5	101	99	17.5	G 1/2 B	135	27	2.1
160	> 0.25	100	15.5	49.5	161	159	17.5	G 1/2 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

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