Diaphragm Pressure Gauges
Industrial Series, Grey Cast Iron
Model 422.12/423.12, without/with Liquid Filling

Applications

- For measuring points with increased overpressure
- With liquid-filled case for applications with high dynamic pressure pulsations or vibrations
- 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 plant construction

Special Features

- Compatible with alarm contacts and transmitters
- 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
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
≤ 0.4 bar: 5 x full scale value
> 0.4 bar: 3 x full scale value, max. 40 bar

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

Temperature effect
When temperature of the measuring system 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

Data Sheets showing similar devices:
Electrical Alarm Contacts; Models 8x1 and Model 830; see Data Sheet AC 08.01
Diaphragm Pressure Gauges, Stainless steel series; Model 432.50; see Data Sheet PM 04.03
Elastic Element Pressure Gauges; see Data Sheet IN 00.01

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Standard version

Process connection with lower diaphragm housing
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

Diaphragm sealing ring
NBR

Movement
Cu-alloy, wear parts argentan

Dial
Aluminium, white, black lettering

Pointer
Aluminium, black

Case with upper diaphragm housing
Grey cast iron, black

Window
Instrument glass

Bezel ring
Cam ring (bayonet type), stainless steel, black

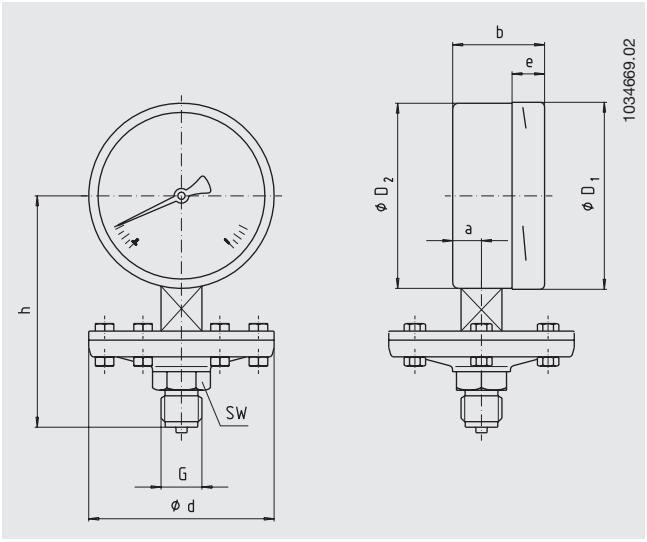
Filling liquid (for model 423.12)
Glycerine 86.5 %

Options

- Other process connection
- Wetted parts made of stainless steel (model 432.12)
- Overpressure safe: 10 x full scale value, max. 40 bar
- Vacuum safe up to -1 bar
- Open connecting flanges per DIN/ASME form DN 15 to DN 80 (preferably DN 25 and 50 or DN 1" and 2" per data sheet IN 00.10)
- Pressure element > 2,5 bar: NiCrCo-alloy (Duratherm)
- Alarm contacts (see data sheet AC 08.01)

Dimensions in mm

Standard version



NS	Pressure range	Dimensions in mm									Weight
	in bar	d	a	b	D_1	D_2	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.

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

Specifications and dimensions given in this leaflet represent the state of engineering at the time of printing.
Modifications may take place and materials specified may be replaced by others without prior notice.

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