

# Diaphragm Pressure Gauges Standard Series Sealgaug<sup>®</sup> Type 422.12 - Dry Case Type 423.12 - Liquid-filled Case

WIKA Datasheet 42X.12

## Applications

- With liquid filled case for applications with high dynamic pressure pulsations or vibration
- Suitable for corrosive environments and gaseous or liquid media that will not obstruct the pressure system
- Process industry: chemical/petrochemical, power stations, mining, on and offshore, environmental technology, mechanical engineering and plant construction

## Special features

- Excellent load-cycle stability
- Heavy duty cast iron case
- High overpressure safety

## Standard Features

### Design

EN 837-3

### Sizes

4" & 6" (100 & 160 mm)

### Accuracy class

± 1.5% of span

### Ranges

Vacuum / Compound to 200 psi  
Pressure from 10" H<sub>2</sub>O to 100" H<sub>2</sub>O (6" flange diameter)  
Pressure from 6 psi to 600 psi (4" flange diameter)  
or other equivalent units of pressure or vacuum

### Working pressure

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

### Overpressure safety

< 6 psi: 5 x full scale value  
≥ 6 psi: 3 x full scale value, max. 600 psi

### Operating temperature

Ambient: -4°F to +140°F (-20°C to +60°C)  
Medium: +212°F (+100°C) maximum



Diaphragm Pressure Gauge Model 422.12

### Temperature error

Additional error when temperature changes from reference temperature of 68°F (20°C) ±0.8% for every 18°F (10°C) rising or falling. Percentage of span.

### Weather protection

Weather resistant (NEMA 3 / IP54) - dry case  
Weather tight (NEMA 4X / IP65) - liquid-filled case

### Pressure connection and lower diaphragm housing

Material: carbon steel, black finish  
Lower mount (LM)  
1/2" NPT female

### Case and upper diaphragm housing

Material: cast iron, black finish  
Case with black-painted steel bayonet ring

### Diaphragm element

≤ 30 psi: 316L stainless steel  
> 30 psi: carbon steel  
All ranges with Buna-N sealing gasket

### Movement

Material: copper alloy with nickel-alloy wearable parts

### Dial

White aluminum with black lettering

**Pointer**

Black aluminum, adjustable

**Window**

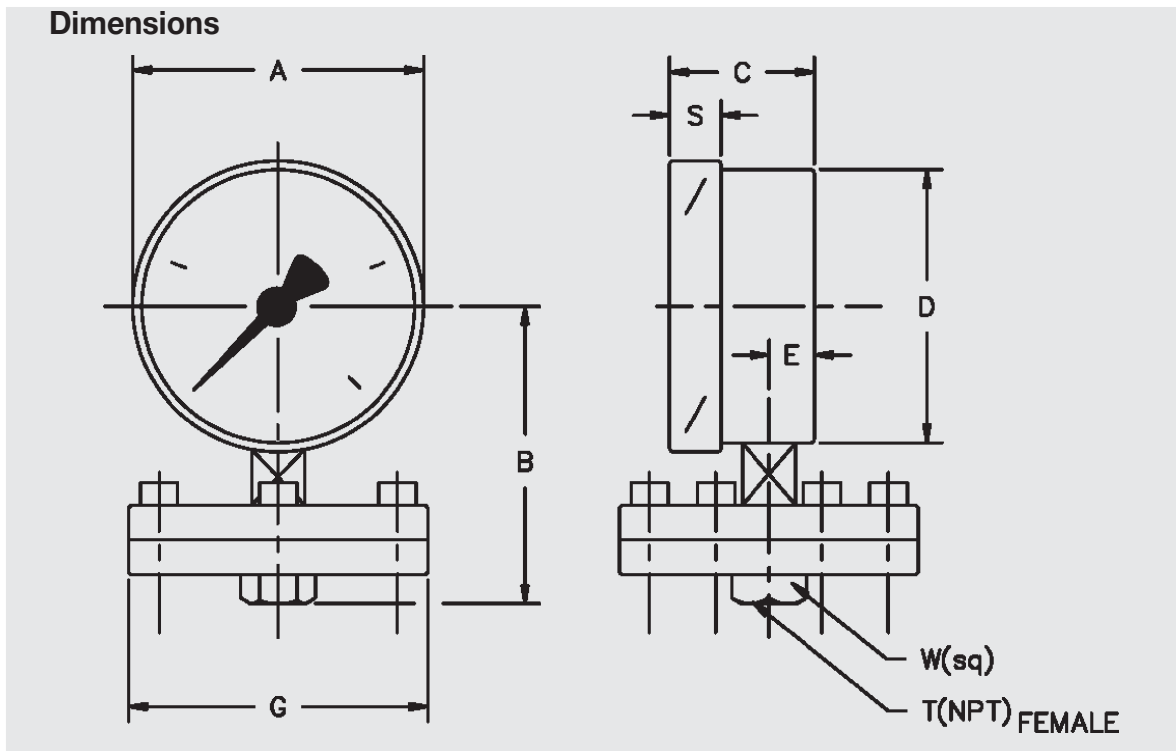
Flat instrument glass with Buna-N gasket

**Case fill**

Glycerine 99.7% - Type 423.12

**Optional extras**

- 10X overpressure safety, max. 600 psi
- Underpressure safe to -30" Hg
- Silicone for fluorolube case filling
- Special connections limited to wrench flat area
- Open flange connections (300# ASME maximum)
- Safety glass or acrylic window
- Cleaned for oxygen service
- Extended media temperature to +392°F
- Exotic metal or PTFE lining for open flanges
- Alarm contacts switches (magnetic or inductive)
- Special process connections
- Custom dial layout

**Dimensions**

Size		A	B	C	D	E	G <sup>1</sup>	S	T	W	Weight
4"	mm	100	104	49.5	99	15.5	100	17.5		27	
	in	4.0	4.09	1.95	3.90	0.61	3.94	0.69	1/2"	1.06	4.5 lb.
6"	mm	160	134	49.5	159	15.5	100	17.5		27	
	in	6.0	5.28	1.95	6.26	0.61	3.94	0.69	1/2"	1.06	6.5 lb.

<sup>1</sup> For ranges 100"H<sub>2</sub>O and lower, G dimension changes to 160 mm (6") and weight increases by 2.9 lb.

**Ordering information**

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