

Diaphragm Pressure Gauges Standard Series Sealgauge Type 432.12 - Dry Case Type 433.12 - Liquid-filled Case

WIKA Datasheet 43X.12

Applications

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

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" H₂O to 100" H₂O (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: 0.9x full-scale value

Overpressure safety

< 6 psi: 5x full-scale value
30 ≥ 6 psi: 3x full-scale value
> 30 psi: 5x 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 432.12

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: 316L stainless steel
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

316L stainless 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

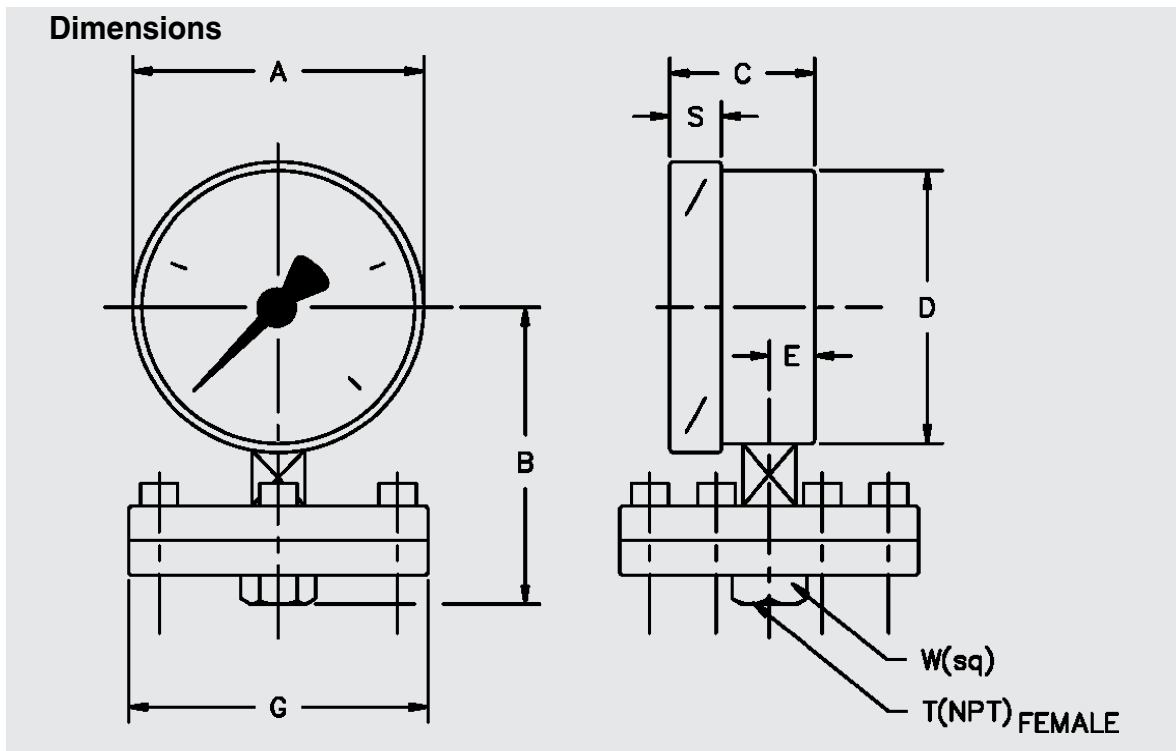
Flat instrument glass with Buna-N gasket

Case fill

Glycerine 99.7% - Type 423.12

Optional extras

- 10x overpressure safety, max. 600 psi
- Underpressure safe to -30"Hg
- Silicone or 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



Size		A	B	C	D	E	G ¹	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.

¹ For ranges 4 psi and lower, G dimension changes to 160 mm (6") and weight increases by 2.9 lbs.

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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