

# Diaphragm Pressure Gauges

## Process Industry Series Sealgauge®

### Type 432.56 - Dry Case

### Type 433.56 - Liquid-filled case

WIKA Datasheet 43X.56

#### Applications

- With liquid filled case optional for applications with high dynamic pressure pulsations or vibration and overpressure
- Suitable in corrosive environments for gaseous, liquid or highly viscous media.
- Process industry: chemical/petrochemical, power stations, mining, on and offshore, environmental technology, mechanical engineering and plant construction
- Ideally for applications in the water/wastewater industry

#### Product features

- Wide selection of special wetted materials
- All stainless steel construction
- High overpressure safety up to 1,500 psi (100 bar)
- Ranges from 6" H<sub>2</sub>O (16 mbar)

#### Specifications

##### Design

EN 837-3

##### Sizes

4" & 6" (100 & 160 mm)

##### Accuracy class

±1.5% of span

##### Ranges

Vacuum/Compound to 600 psi (40 bar)  
 Pressure from 6" H<sub>2</sub>O (16 mbar) to 100" H<sub>2</sub>O (250 mbar),  
 6" (160 mm) flange diameter  
 Pressure from 6 psi (400 mbar) to 600 psi (40 bar),  
 4" (100 mm) 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

Choice of 600 psi (40 bar) or 1,500 psi (100 bar)

##### Operating temperature

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



Diaphragm Pressure Gauge Model 432.56

##### Temperature error

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

##### Weather protection

Weather resistant (NEMA 3 / IP54) - dry case  
 Weather tight (NEMA 4X / IP66) - liquid-filled case

##### Pressure connection and lower diaphragm housing

Material: 316 stainless steel  
 Lower mount (LM)  
 1/2" NPT female

##### Upper diaphragm housing

≤100" H<sub>2</sub>O (250 mbar): Chrome steel  
 >100" H<sub>2</sub>O (250 mbar) Stainless steel

##### Diaphragm element

≤ 100" H<sub>2</sub>O (250 mbar): 316 stainless steel  
 > 100" H<sub>2</sub>O (250 mbar): Inconel® (NiCr-alloy)  
 All ranges with FPM/FKM (Viton) sealing gasket

##### Movement

Stainless steel

## Dial

White aluminum with black lettering

## Pointer

Black aluminum, adjustable - Type 432.56

Black aluminum, non-adjustable - Type 433.56

## Case

304 stainless steel with pressure relief disc and stainless steel bayonet ring

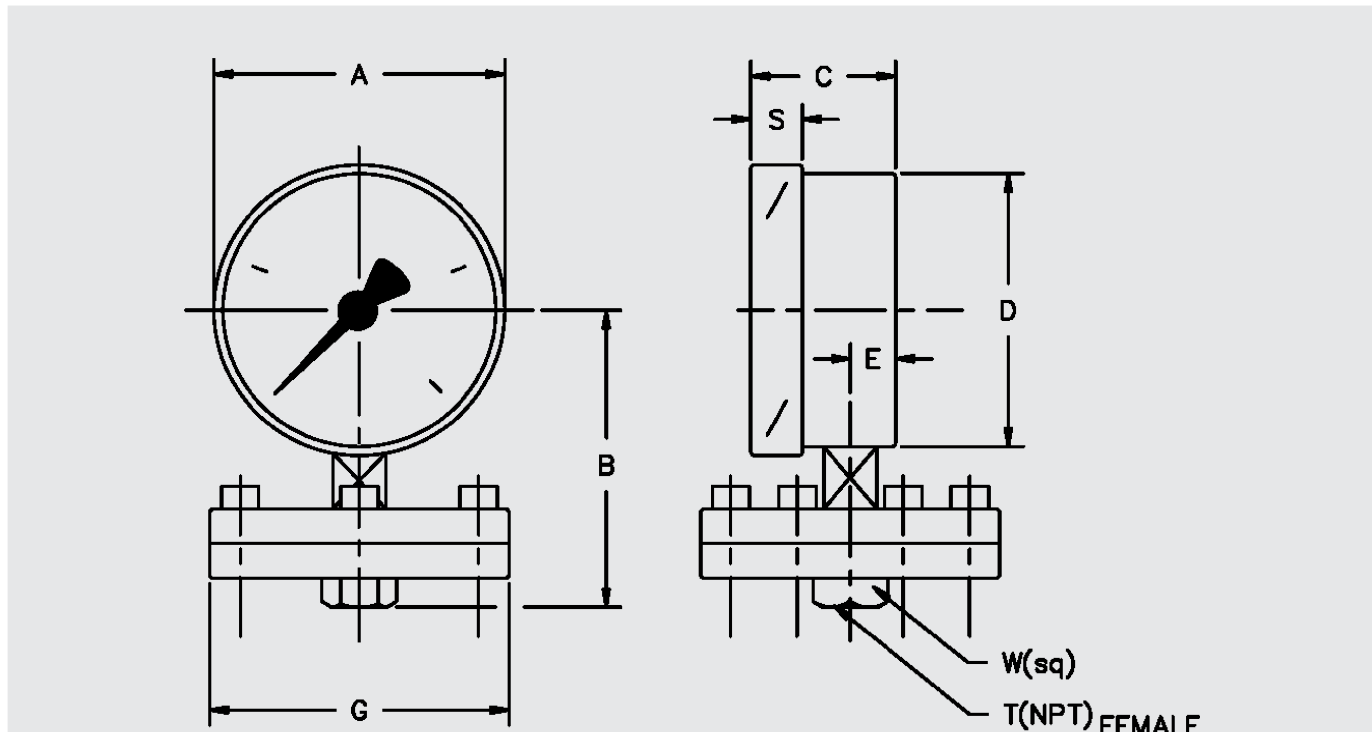
## Window

Laminated safety glass with Buna-N gasket

## Case fill

Glycerine - Type 433.56

## Dimensions



## Optional extras

- Other process connections
- Case filling (type 433.56)
- Vacuum safe to -30" Hg (-1 bar)
- Max. medium temperature +392°F (+200°C)
- Max. ambient temperature -40°F...+140°F (-40°C...+60°C), silicone case filling
- Higher accuracy, class 1.0 per EN 837-3
- Open connecting flanges per DIN/ASME, DN 15 to DIN 80 (preferred nominal widths DN 25 and 50 or DN 1" and 2")
- Wetted parts made of special materials, high overpressure safe up to 150 psi (10 bar), ranges  $\leq 100''$  H<sub>2</sub>O (250 mbar) or 600 psi (40 bar)-ranges  $> 100''$  H<sub>2</sub>O (250 mbar): PTFE (type 452.56, 453.56), Hastelloy, Monel, nickel, tantalum, titanium (accuracy class 2.5)
- Alarm contacts
- With electrical output signal (model PGT 43HP)

Size		A	B	C	D	E	G'	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	3.8 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	4.9 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 4.0 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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