

Mini diaphragm pressure gauge UHP, nominal sizes 1" and 1.3" Models 432.10, 432.15

WIKA data sheet PM 04.18

Applications

- For gaseous and liquid, also aggressive media for demanding high purity applications, also in aggressive ambience
- Semiconductor and flat panel industry
- Gas distribution systems
- Medical gases
- Hook-up application

Special features

- Mechanical pressure gauge with diaphragm element
- Compact design for minimal dead volume and reduced particle generation and entrapment
- Helium leak tested, leak rate $\leq 10^{-9}$ mbar · l/s
- Electropolished wetted parts, surfaces with $R_a < 0.25 \mu\text{m}$ ($R_a < 10 \mu\text{in}$) for diaphragm element and measuring chamber
- Process connector components from electropolished 316L with metal sealing disc, orbital welded to measuring chamber



Fig. left: Model 432.10, nominal size 1"

Fig. right: Model 432.15, nominal size 1.3"

Description

The mini diaphragm gauge was developed for high purity applications with limited space requirements, such as smaller integrated gas stick and gas box assemblies.

The nominal sizes of 1" and 1.3" are ideal for applications involving gaseous, liquid and corrosive media up to 160 psi.

The mini diaphragm gauge is helium leak tested and the internals are electropolished to optimally meet purity standards.

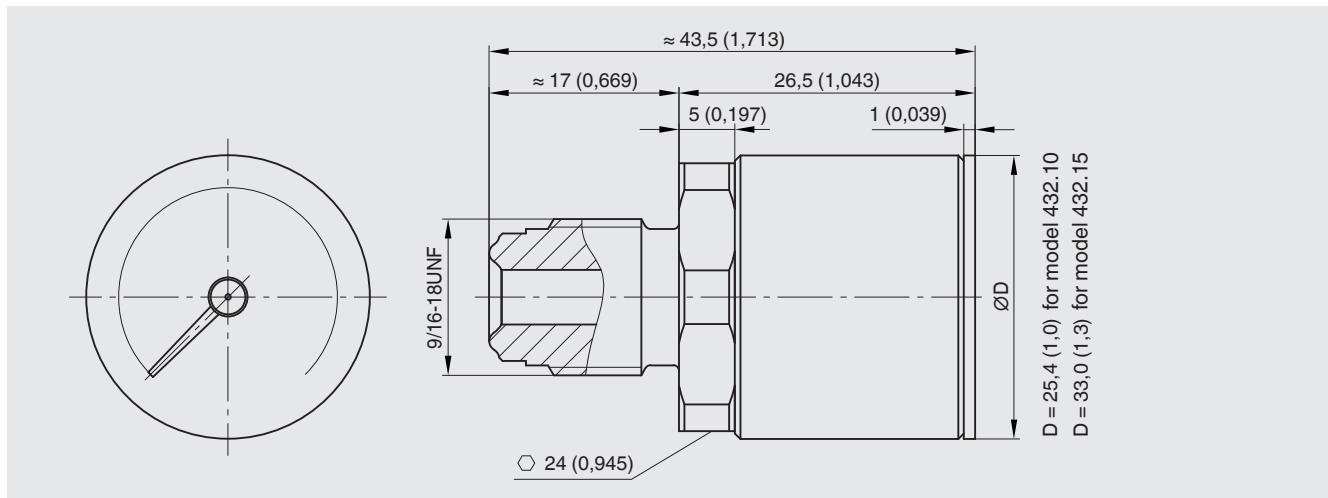
With such UHP characteristics, the mini diaphragm gauge is suitable for the semiconductor and flat panel industries, various gas distribution systems, as well as medical gas applications.

The mini diaphragm gauge complies with SEMATECH and SEMI standards to optimally ensure the quality your applications demand.

Specifications

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Version	Diaphragm pressure gauge
Nominal size (NS)	1.0" (25.4 mm) for model 432.10 1.3" (33 mm) for model 432.15
Accuracy class	Grade C per ASME B40.1
Scale range	■ -30 inHg ... +60 psi ■ -30 inHg ... +130 psi ■ -30 inHg ... +160 psi ■ 0 ... 160 psi or all other equivalent vacuum or combined pressure and vacuum ranges
Pressure limitation	Steady: Full scale value Fluctuating: 0.9 x full scale value Short time: 1.3 x full scale value
Permissible temperature range	Medium $\leq 140^{\circ}\text{F}$ ($\leq 60^{\circ}\text{C}$) Ambient $-10 \dots +140^{\circ}\text{F}$ ($-10 \dots +60^{\circ}\text{C}$)
Ingress protection	IP54 per IEC/EN 60529
Process connection	1/4 fixed male face seal 9/16-18 UNF
Pressure element	Inconel® 718
Dial	Aluminium, white Black lettering
Case	Stainless steel 316L
Pointer	Aluminium, black
Window	PMMA

Dimensions in mm (in)



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