

Diaphragm pressure gauge Stainless steel version

Model 432.56, high overpressure safety up to 100 bar

Model 432.36, safety version, high overpressure safety up to 400 bar

WIKA data sheet PM 04.07



Applications

- For measuring points with increased overpressure
- For gaseous, liquid and aggressive media, also in aggressive ambience
- With the open connecting flange option also for contaminated and viscous media
- Process industry: Chemical, petrochemical, power plants, mining, on- and offshore, environmental technology, machine building and general plant construction

Special features

- High overpressure safety, optionally up to 40, 100 or 400 bar, due to metallic diaphragm cushion, without liquid-filled measuring cell
- Wide choice of special materials
- Compatible with switch contacts
- All stainless steel construction
- Scale ranges from 0 ... 16 mbar



Diaphragm pressure gauge model 432.56

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) ¹⁾

0 ... 400 mbar to 0 ... 40 bar (flange Ø 100 mm) ¹⁾

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

40, 100 or 400 bar

Permissible temperature

Ambient: -20 ... +60 °C

Medium: +100 °C maximum

Temperature effect

When the temperature of the measuring system deviates from the reference temperature (+20 °C):

max. ±0.8 %/10 K of full scale value

Ingress protection

IP 54 per EN 60529 / IEC 529

¹⁾ Flange Ø for model 432.36, high overpressure safety up to 400 bar see page 2

Standard version

Process connection with lower measuring flange

Stainless steel,
G ½ B (male), 27 mm flats

Pressure element

≤ 0.25 bar: Stainless steel
> 0.25 bar: NiCr-alloy (Inconel)

Pressure chamber sealing

FPM/FKM

Movement

Stainless steel

Dial

Aluminium, white, black lettering

Pointer

Adjustable pointer, aluminium, black

Case

Stainless steel, gauges with liquid filling with compensating valve to vent case
Model 432.56: with blow-out device
Model 432.36: safety version with solid baffle wall and blow-out back

Upper measuring flange

≤ 0.25 bar: Chrome steel
> 0.25 bar: Stainless steel

Window

Laminated safety glass

Bezel ring

Cam ring (bayonet type), stainless steel

CE conformity

Pressure equipment directive

97/23/EC, PS > 200 bar, module A, pressure accessory

ATEX directive ¹⁾

94/9/EC, II 2 GD c TX

¹⁾ Option

Options

- Other process connection
- Sealings (model 910.17, see data sheet AC 09.08)
- Liquid filling (models 433.56, 433.36, ingress protection IP 65)
- Vacuum safe to -1 bar
- Max. medium temperature +200 °C
- Permissible ambient temperature -40 ... +60 °C (silicone oil filling)
- Higher indication accuracy, class 1.0
- Open connecting flanges per DIN/ASME, DN 15 to DN 80 (preferred nominal widths DN 25 and 50 or DN 1" and 2" per data sheet IN 00.10)
- Wetted parts made of special materials, high overpressure safety up to 10 bar (flange Ø 160 mm) or 40 bar (flange Ø 100 mm): PTFE (models 452.56, 452.36), Hastelloy, Monel, nickel, tantalum, titanium (accuracy class 2.5)
- Additional wall bracket for model 432.36, high overpressure safety up to 400 bar
- Pressure gauge with switch contacts, see data sheet PV 24.07
- Pressure gauge with electrical output signal, see model PGT43HP, data sheet PV 14.07

Special version

Model 432.36 high overpressure safety up to 400 bar

Scale ranges:

0 ... 25 mbar to 0 ... 250 mbar (flange Ø 190 mm)

0 ... 400 mbar to 0 ... 40 bar (flange Ø 120 mm)

Flange connecting screws: Steel, corrosion-protected

Note: For increased vibration loads (> 0.5 g) use an additional wall bracket (see options).

Approvals

- **GOST**, metrology/measurement technology, Russia
- **GOST-R**, import certificate, Russia
- **KOSHA**, ignition protection type „i“ - intrinsic safety, South Korea
- **CRN**, safety (e.g. electr. safety, overpressure, ...), Canada

Certificates ¹⁾

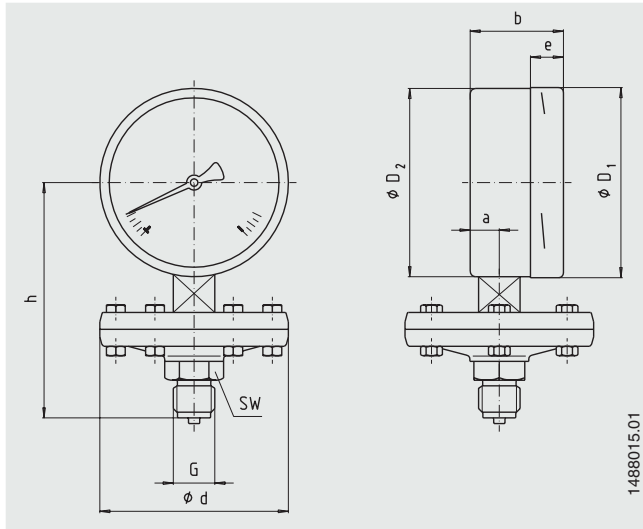
- 2.2 test report per EN 10204 (e.g. state-of-the-art manufacturing, material proof, indication accuracy)
- 3.1 inspection certificate per EN 10204 (e.g. material proof wetted parts metal component, indication accuracy)

¹⁾ Option

Approvals and certificates, see website

Dimensions in mm

Standard version



1488015.01

NS	Scale ranges	Overpressure safety up to ... bar	Dimensions in mm								Weight in kg	
	in bar		d	a	b	D ₁	D ₂	e	G	h ±2		SW
100	≤ 0.25	40	160	15.5	49.5	101	99	17.5	G ½ B	135	27	3.4
	≤ 0.25	100	160	15.5	49.5	101	99	17.5	G ½ B	135	27	4.7
	≤ 0.25	400	190	23.5	59	101	100	17.5	G ½ B	155	27	15.7
	> 0.25	40	100	15.5	49.5	101	99	17.5	G ½ B	135	27	1.7
	> 0.25	100	100	15.5	49.5	101	99	17.5	G ½ B	135	27	1.8
	> 0.25	400	120	23.5	59	101	100	17.5	G ½ B	155	27	4.0
160	≤ 0.25	40	160	15.5	49.5	161	159	17.5	G ½ B	165	27	4.0
	≤ 0.25	100	160	15.5	49.5	161	159	17.5	G ½ B	165	27	5.3
	≤ 0.25	400	190	23.5	65	161	160	17.5	G ½ B	184	27	16.3
	> 0.25	40	100	15.5	49.5	161	159	17.5	G ½ B	165	27	2.2
	> 0.25	100	100	15.5	49.5	161	159	17.5	G ½ B	165	27	2.3
	> 0.25	400	120	23.5	65	161	160	17.5	G ½ B	184	27	4.6

Process connection per EN 837-3 / 7.3

Ordering information

Model / Nominal size / Overpressure safety up to ... bar / Scale range / Connection size / Options

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