

Diaphragm Pressure Gauges

Process Industry Series

High Overpressure Safety up to 40 or 100 bar • Model 432.56

High Overpressure Safety up to 400 bar • Model 432.36

Pressure Gauges

Service intended

Where low system pressure to be measured alternates with high pressure cycles. All stainless steel pressure gauge. Suitable for corrosive environments and gaseous and liquid media. With optional flange connection also for viscous and contaminated media.

Design

EN 837-3, a choice of overpressure safety is available up to 40, 100 or 400 bar, metallic diaphragm cushion provides for overpressure safety, without diaphragm hydraulically cushioned.

Nominal size

100 and 160 mm

Accuracy class per EN 837-3 /6

1.6

Scale ranges per EN 837-3 /5

0 ... 16 mbar to 0 ... 250 mbar (model 432.56 flange Ø 160 mm)
0 ... 400 mbar to 0 ... 40 bar (model 432.56 flange Ø 100 mm)
or other equivalent units of pressure or vacuum.

Working pressure

Steady: full scale value

Fluctuating: 0.9 x full scale value

Overpressure safety

40, 100 or 400 bar

Operating temperature

Ambient: -20 ... +60 °C

Medium: +100 °C maximum

Temperature error

Additional error when temperature of the pressure element deviates from + 20 °C

Rising temperature: +0.5 %/10 K of true scale value

Falling temperature: -0.5 %/10 K of true scale value

Degree of protection

IP 54 per EN 60 529 / IEC 529

Standard features

Pressure connection (exposed to pressure medium)

Lower diaphragm housing

Material: stainless steel 1.4571

Threaded entry per EN 837-3 /7.3, G ½ B (male), 27 mm flats

Pressure element (exposed to pressure medium)

≤ 0.25 bar: stainless steel 1.4571

> 0.25 bar: Duratherm (NiCrCo-alloy)

Diaphragm sealing ring (exposed to pressure medium)

FPM (Viton)

Movement

Material: stainless steel

Dial

White aluminium with black lettering



Pointer

Adjustable black aluminium pointer

Case

Natural finish stainless steel case with pressure vent in case back (model 432.36 see overleaf)

Upper diaphragm housing

Chrome steel

Window

Laminated safety glass

Bezel ring

Cam ring (bayonet type), natural finish stainless steel

Optional extras

- Liquid filling (**model 433.56**)
- Safety pattern case (**model 43X.36**)
- Vacuum safe to -1 bar
- Medium temperature > 100 °C
- Pressure connection with DIN or ANSI flange DN 15 to DN 80 (preferably DN 25, DN 50 or DN 1", DN 2" see data sheet IN 00.10)
- Diaphragm and wetted parts made of special materials, overpressure safe up to 10 bar (flange Ø 160 mm) or 40 bar (flange Ø 100 mm):
PTFE (Teflon) foil (**model 45X.56**), Hastelloy B2, Hastelloy C4
Monel, Nickel, Tantalum, Titanium, Silver
- Alarm contacts (see data sheet AE 08.01)
- Transmitters (see data sheet AE 08.02)

Special version

Model 432.36 overpressure safe up to 400 bar

Case with blow-out back per EN 837-3

Scale ranges per (EN 837-3 /5):

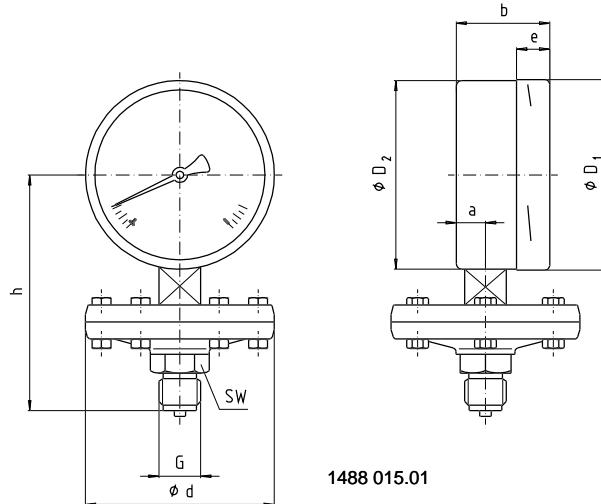
0 ... 25 mbar to 0 ... 250 mbar (flange Ø 190 mm)

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

Flange connecting screws: carbon steel, corrosion-protected

Dimensions

Standard version



Nominal size	Scale range [bar]	Over pressure safe [bar]	Dimensions [mm]									Weight [kg]	
			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	
		100										4.7	
		400										15.7	
	> 0.25	40	100	15.5	49.5							99	1.7
		100											1.8
		400											4.0
160	≤ 0.25	40	160	15.5	49.5	161	159	17.5	G ½ B	165	27	4.0	
		100										5.3	
		400										16.3	
	> 0.25	40	100	15.5	49.5							159	2.2
		100											2.3
		400											4.6

Standard pressure entry with parallel thread and seating to EN 837-3 /7.3.

Ordering information

State:

Model / Nominal size / Scale range / Size of connection / Overpressure rating ... bar / 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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