

# Diaphragm Pressure Gauges

## Process Industry Series • Model 432.50

### Pressure Gauges

#### Service intended

All stainless steel pressure gauges.  
Suitable for corrosive environments and gaseous and liquid media. With optional flange connection for viscous and contaminated media.

#### Design

EN 837-3

#### 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 (flange Ø 160 mm)  
0 ... 400 mbar to 0 ... 40 bar (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

5 x full scale value, 40 bar maximum

#### Operating temperature

Ambient: -20 ... +60 °C  
Medium: +100 °C maximum

#### Temperature effect

When temperature of the pressure element deviates from reference temperature (+20 °C):  
max. ±0.8%/10 K of true scale value

#### Ingress protection

IP 54 per EN 60 529 / IEC 529

#### Standard features

##### Pressure connection

Lower diaphragm housing  
Material: stainless steel 1.4571  
Threaded entry per EN 837-3 /7.3, G ½ B (male), 22 mm flats

##### Pressure element

≤ 0.25 bar: stainless steel 1.4571  
> 0.25 bar: Duratherm (NiCrCo-alloy)

##### Diaphragm sealing ring

FPM (Viton)

##### Movement

Material: stainless steel

##### Dial

White aluminium with black lettering

##### Pointer

Black aluminium pointer



#### Case and upper diaphragm housing

Stainless steel case with pressure vent in case back

#### Window

Laminated safety glass

#### Bezel ring

Cam ring (bayonet type), stainless steel

#### Optional extras

- Liquid filling, glycerine 86.5 % (**model 433.50**)
- Solid front (**model 43X.30**)
- 10 x overpressure safe, maximum 40 bar
- Vacuum safe
- Medium temperature +200 °C maximum
- Accuracy class higher, class 1.0 and 0.6
- 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 lined or coated with special materials such as: PTFE (Teflon) foil (**model 45X.50**), Hastelloy B2, Hastelloy C4, Monel, Nickel, Tantalum, Titanium, Silver
- Alarm contacts (see data sheet AE 08.01), liquid filled: isolating oil
- Transmitters (see data sheet AE 08.02)

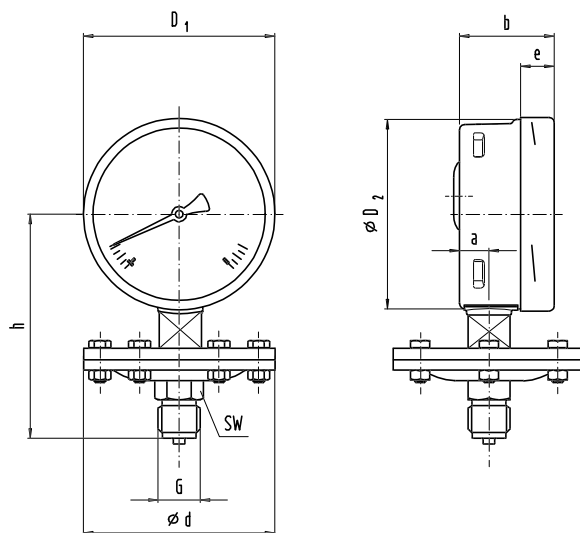
#### Instruments with special approvals: <sup>1)</sup>

- DVGW declaration for the use in gas supply systems
- DIN/DVGW registration: pressure switch acc. to EN 1854
- Pressure switch acc. to VdTÜV codes of practice 100/1
- Conformity certificate for intrinsically safe electrical equipment (mining)
- Gost-standard approval (Russia)
- Design approval for connection to dust- $\text{Ex}$  category zone 10
- Design approval for connection to hazardous zone 0

1) specification on inquiry

## Dimensions

### Standard version



1034 669.05

Nominal size	Pressure range [bar]	Dimensions [mm]									Weight [kg]
		d	a	b	$D_1$	$D_2$	e	G	$h \pm 2$	SW	
100	$\leq 0.25$	160	15.5	49.5	101	99	17.5	$G \frac{1}{2} B$	119	22	2.5
160			15.5	49.5	161	159	17.5	$G \frac{1}{2} B$	149	22	2.9
100	$> 0.25$	100	15.5	49.5	101	99	17.5	$G \frac{1}{2} B$	117	22	1.3
160			15.5	49.5	161	159	17.5	$G \frac{1}{2} B$	147	22	1.7

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

## Ordering information

State:

Model / Nominal size / Scale range / Size and location of connection / Optional extras required



INGENIEROS ASOCIADOS DE CONTROL S.L.

Tel.: 91 383 1390  
comercial@iac-sl.es