

Differential Pressure Gauges

Process Industry Series, with Diaphragm Element
All Welded Construction • Model 732.51

Pressure Gauges

Service intended

All stainless steel pressure gauge. Suitable for corrosive environments and gaseous and liquid media that will not obstruct the pressure system.

Design

WIKA trade pattern DT - GM 86 08 176

All welded construction of diaphragm and pressure chambers

Pressure chamber below dial, bottom pressure entry

Other configuration feasible

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 ... 25 bar

(Scale range 0 ... 16 mbar: full scale length approx. 180 °)

or other equivalent units of pressure or vacuum

Working pressure

Steady: full scale value

Fluctuating: 0.9 x full scale value

Static pressure rating

See table overleaf

Overpressure safety

See table overleaf

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. $\pm 0.5\%/10$ K of true scale value

Ingress protection

IP 54 per EN 60 529 / IEC 529

Standard features

Pressure connection (exposed to pressure medium)

Pressure chamber

Material: stainless steel 1.4571

Threaded entry per EN 837-1 / 7.3, 2 x G 1/4 female

Pressure element (exposed to pressure medium)

≤ 0.25 bar stainless steel 1.4571,

> 0.25 bar Duratherm (NiCrCo-alloy)

Sealing bellows (exposed to pressure medium)

Stainless steel 1.4571



Air bleeding plugs (exposed to pressure medium)

Stainless steel 1.4571

Scale ranges ≤ 0.25 bar (Option: ranges ≥ 0.4 bar)

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

Window

Laminated safety glass

Bezel ring

Cam ring (bayonet type), natural finish stainless steel

Gauge mounting

Pressure entries identified ⊕ and ⊖,

⊕ high pressure,

⊖ low pressure,

Requires mounting by means of rigid tailpipe or panel or surface mounting flange. Body incorporates threaded mounting holes,

Additional pipe or surface mounting bracket is optionally available.

Static pressure/Overpressure safety maximum

Pressure ranges	Static pressure max. [bar]		Overpressure safe (either side) max. [bar]	
	Standard	Option	Standard	Option
0 ... 16 to 0 ... 40 mbar	2.5	6 ¹⁾	2.5	-
0 ... 60 to 0 ... 250 mbar	6	10	2.5	6
0 ... 400 mbar	25	40	4	40
0 ... 0.6 bar	25	40	6	40
0 ... 1 bar	25	40	10	40
0 ... 1.6 bar	25	40	16	40
0 ... 2.5 to 0 ... 25 bar	25	40	25	40

1) Accuracy class 2.5

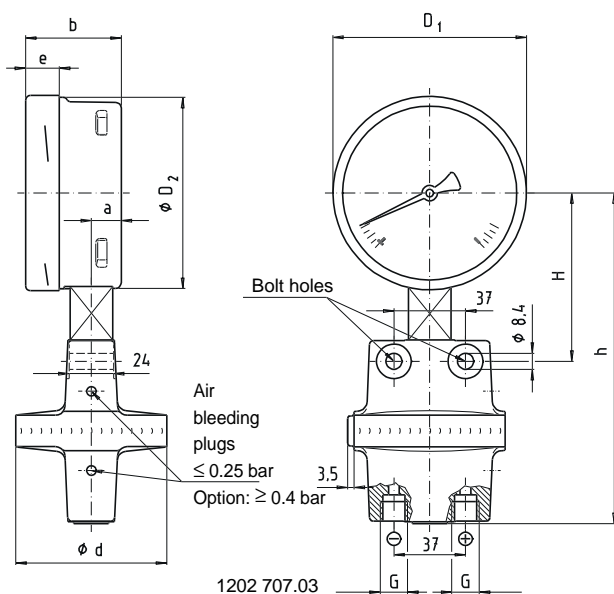
Optional extras

- Liquid filling (**model 733.51**)
- Safety pattern case (**model 73X.31**)
- Higher static pressure and overpressure safe (see table)
- Accuracy class better than 1.6
- Air bleeding plugs ranges ≥ 0.4 bar
- Zero adjustment
- Panel or surface mounting rings (consider possible conflict with pressure chamber)
- Other threaded pressure connection, male or female
- Pipe or surface mounting bracket
- Pressure entry at sides, front or rear of pressure chamber
- Indication of differential pressure and static pressure (with additional gauge)
- Medium temperature > 100 °C
- Pressure equalising valve (see data sheet AM 09.11)
- Alarm contacts (see data sheet AC 08.01)
- Transmitters (see data sheet AE 08.02)

Dimensions

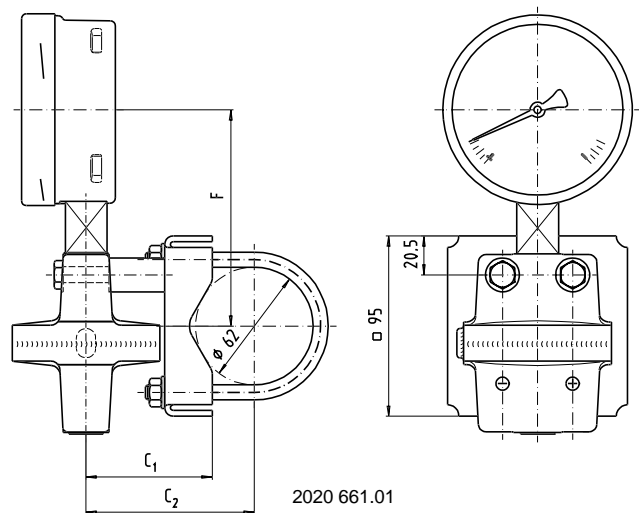
Standard version

bottom entry 2 x G ¼ female



Optional version

pipe or surface mounting bracket



Nominal size	Pressure range [bar]	Dimensions [mm]											Weight [kg]	
		a	b	D ₁	D ₂	d	e	G	h ± 1	H	F	C ₁		C ₂
100	≤ 0.25	15.5	49.5	101	99	140	17.5	G ¼	171	90	114	96	118	2.70
	> 0.25	15.5	49.5	101	99	78	17.5	G ¼	171	87	114	66	88	1.90
160	≤ 0.25	15.5	49.5	161	159	140	17.5	G ¼	201	120	144	96	118	3.40
	> 0.25	15.5	49.5	161	159	78	17.5	G ¼	201	117	144	66	88	2.40

Standard pressure entry with parallel thread and seating to EN 837-1 /7.3.

Ordering information

State:

Model / Nominal size / Scale range / Scale layout, e.g. direct pressure reading or square root incrementation / Static pressure rating ... bar / Size and location 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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