

# Stainless steel differential pressure gauge

## Model F5510

**Max. static pressure 100 bar**

Nominal size 100 mm

Accuracy: Class 2,5 (EN), optional 1,6 %



### Features

- Stainless steel case and wetted parts
- Static pressure 100 bar, one side load permitted
- Protection IP65
- High corrosive resistance
- Dry or liquid filled
- Smooth internal surface without recesses
- Flush dual diaphragm, safety design

### Ranges

0 ... 1 bar up to 0 ... 16 bar

### Applications

Chemical and petrochemical industry

Machine and apparatus construction

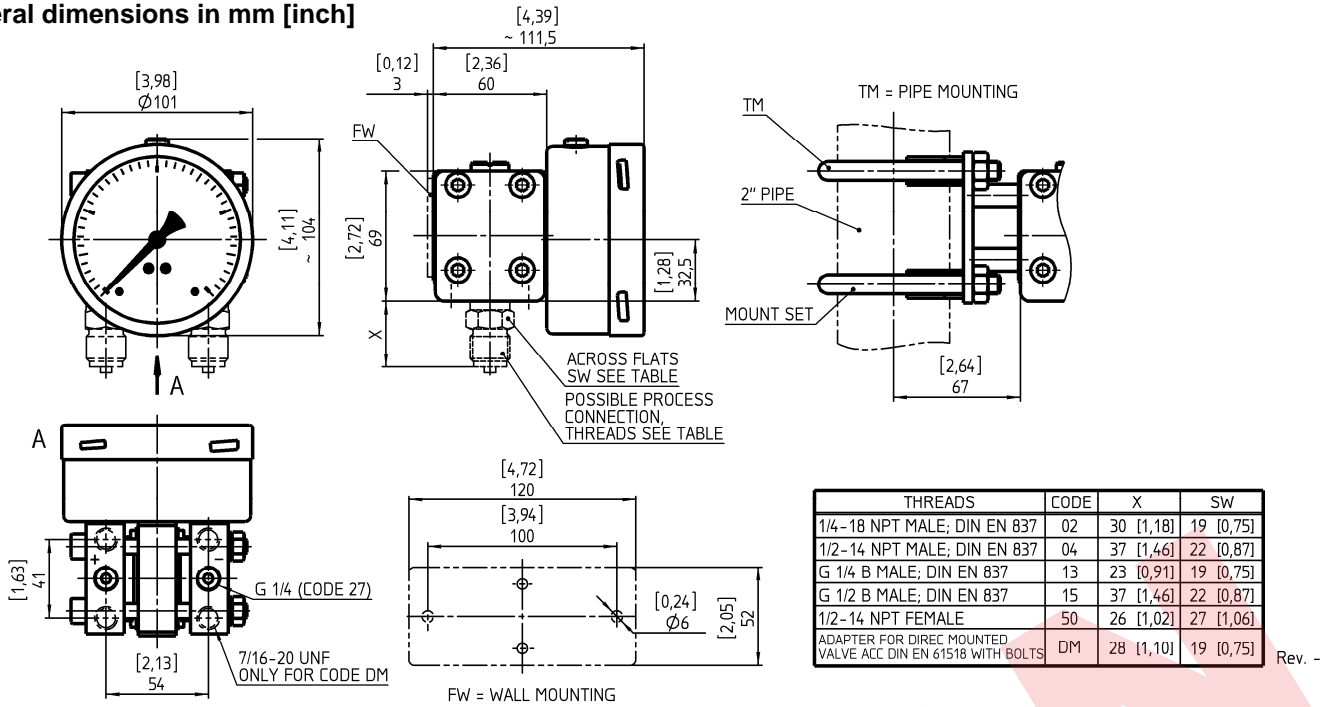
Food and beverage industry

Pulp and paper industry



Technical specification	F5510
Dial size in mm	100
Construction	Cylindrical case with bayonet ring
Zero adjustment	Micro adjustment pointer
Measuring principle	Dual diaphragm (see back side), safety design
Range in bar	1 1,6 2,5 4 6 10 16
Max. static pressure	100 bar
Overload capability	Static pressure is also maximum pressure allowed on one side
Pressure type	Differential
Process connection	G ¼ B female, G ½ B male ¼ NPT male, ¼ NPT female, ½ NPT male, ½ NPT female, Adapter for direct mounted valve acc. DIN EN 61518 with bolts, others on request
Connection location	Lower
Material	
Pressure connection	Stainless steel 316L (1.4404), optional Hastelloy C
Pressure chamber	Stainless steel 316L (1.4404), optional Hastelloy C, Viton O-ring, optional PTFE coated gaskets
Separating diaphragm	Hastelloy C
Intermediate plate	AlMgSiPb HART-COAT®
Case/bayonet ring	Stainless steel 304 (1.4301), optional 316L (1.4404)
Movement	Stainless steel 304 (1.4301)
Window	Laminated safety glass
Dial	Aluminum, black markings on white background
Pointer	Aluminum, black, micrometer adjustable, optional red set hand or minimum/maximum indication
Accuracy	Class 2,5 (2,5 % F.S.), optional 1,6 %
Permissible	
Ambient temperature	-20 ... 80 °C
Medium temperature	Max. 100 °C
Storage temperature	-40 ... 60 °C
Effect	Max. 0,3 % / 10 K
Protection according EN 60 529/IEC 529	IP65
Conformity according to RL 94/9/EC appendix X for mechanical equipment in potential hazardous areas	Optional (in progress)
Filling liquids	Glycerin, silicone, others on request
Mounting	Direct, optional wall or 2" pipe mounting
Weight dry/filled in kg	2,2/2,5
Accessories, options	3 or 5 way direct or remote mounted manifolds, diaphragm seals, NACE/ISO 15156

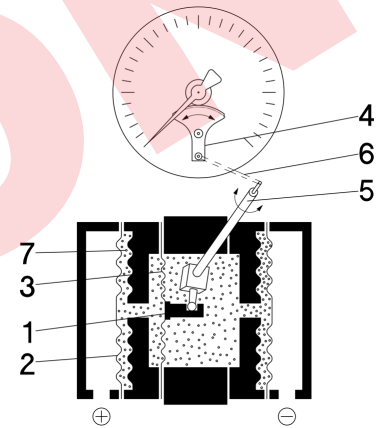
## General dimensions in mm [inch]



## Construction and Operation

The pressures to be compared act by separating two diaphragms hydraulically from the sensing diaphragm. When pressures are equal on both separating diaphragms they are at zero position. Pressure differences deflect the sensing diaphragm to the lower pressure side. The measurement is transmitted from the closed measuring system using a torque rod, and indicated on a 0-270° dial. When the measuring system is stressed on one side beyond the measuring range the separating diaphragms protect the measuring system from overload and damage.

- 1 Connecting rod
- 2 Separating diaphragm
- 3 Sensing diaphragm
- 4 Movement
- 5 Torque rod
- 6 Lever
- 7 Pressure transfer liquid



## Order information

Size	System material	Execution	Process connection	Connection orientation	Range	Engineering unit	Filling/case	Options
(100) 100 mm	(SH) Pressure chamber 316L (1.4404) diaphragm Hastelloy C  (HH) Pressure chamber and diaphragm Hastelloy C	(=) IP65 standard case  (L) Liquid filled IP65	(27) G ¼ female (02) ¼ NPT male (04) ½ NPT male (15) G ½ B male (25) ¼ NPT female (50) ½ NPT female (DM) Adapter for direct mounted valve acc. DIN EN 61518 with bolts  Others on request	(L) Lower	0/ 1 0/ 1,6 0/ 2,5 0/ 4 0/ 6 0/ 10 0/ 16	(BAR)       psi and others on request	(=) Standard no filling (GV) Silicone (GR) Glycerin (YW) Case material 316L (1.4404)	(NH) Tagging wired (AN) Accuracy class 1,6 (6B) Oxygen service (body filled with fluid S4) (CS) Dual scale (DA) Dial marking (FW) Wall mounting bracket (PT) PTFE gasket (TM) 2" pipe mounting bracket (LJ) Field fillable (only for execution =) (ATEX) ATEX listed

## Order example

Size	Type	System material	Execution	Process connection	Connection orientation	Range	Engineering unit	Filling/case	Option
100	F5510	S	=	50	L	0/1	BAR	=	NH

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