

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

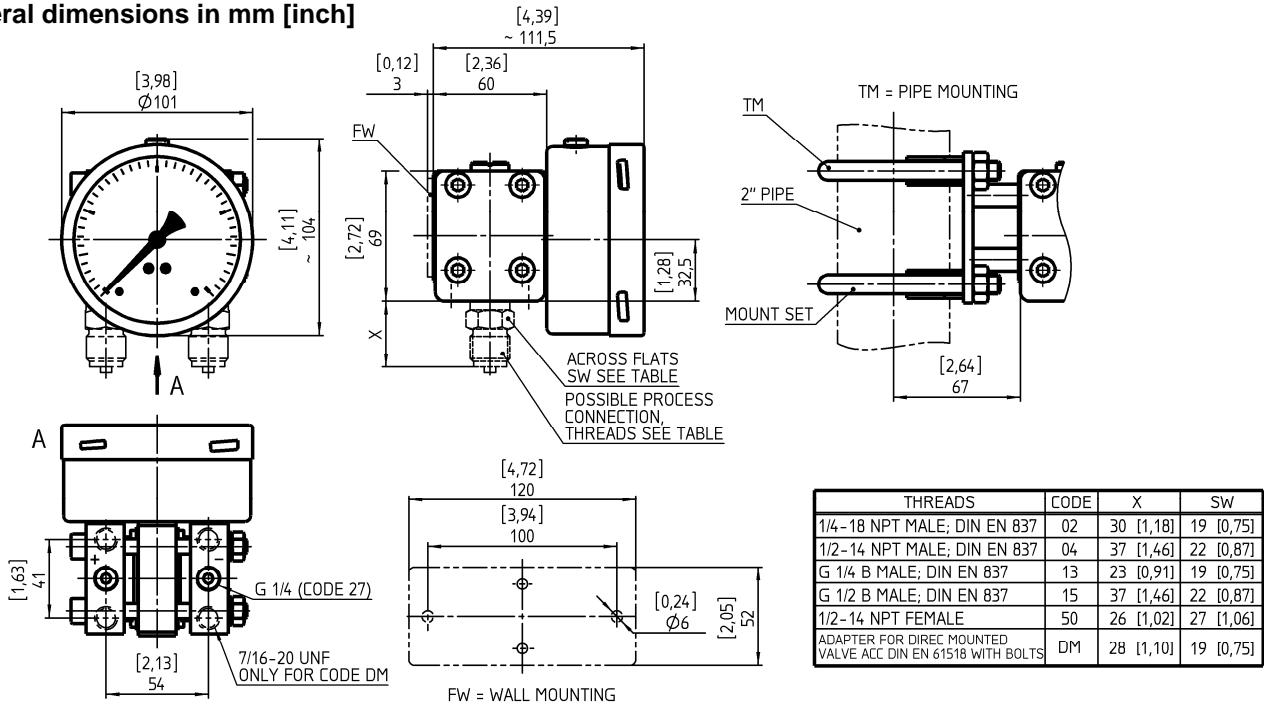
Applications

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, with option ATEX -20 ... 60 °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, marking CE Ex II 2 GD c 95°C IP65 File No. 35078199 at notified body 0032, TÜV NORD CERT
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

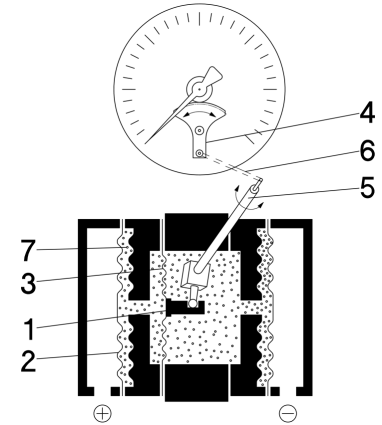
General dimensions in mm [inch]



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	(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	(L) Lower	0/ 1 0/ 1,6 0/ 2,5 0/ 4 0/ 6 0/ 10 0/ 16	(BAR)	(=) 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
		(L) Liquid filled IP65	(DM) Adapter for direct mounted valve acc. DIN EN 61518 with bolts					psi and others on request
Others on request								

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

Ashcroft Instruments GmbH

Germany
Max-Planck-Str. 1, D-52499 Baesweiler
P.O. Box 11 20, D-52490 Baesweiler
Tel.: +49 (0) 2401 808-0, Fax: +49 (0) 2401 808-125

France
48, Chemin des Landes
F-69700 Montagny
Tel.: +33 (0) 9 65 32 71 31, Fax: +33 (0) 4 72 39 10 57

Website: www.ashcroft.eu

United Kingdom
Unit 5 William James House
Cowley Road, Cambridge CB4 0WX
Tel.: +44 (0) 12 23 39 55 00, Fax: +44 (0) 12 23 39 55 01

e-Mail: sales@ashcroft.com