

# Stainless steel differential pressure gauge

## Model F5509 and F6509

Max. static pressure 25 bar

Nominal size 100 mm or 160 mm

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



### Features

- Stainless steel case and wetted parts
- Static pressure 10 bar or 25 bar
- Protection IP54 or IP65
- Chamber purge and bleed connection available
- High corrosive resistance
- Dry or liquid filled
- Optional solid front

### Ranges

0 ... 25 mbar up to 0 ... 250 mbar (max. static pressure 10 bar)

0 ... 400 mbar up to 0 ... 25 bar (max. static pressure 25 bar)

### Applications

Chemical and petrochemical industry

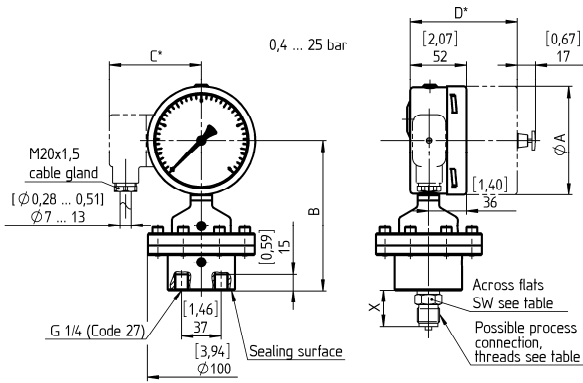
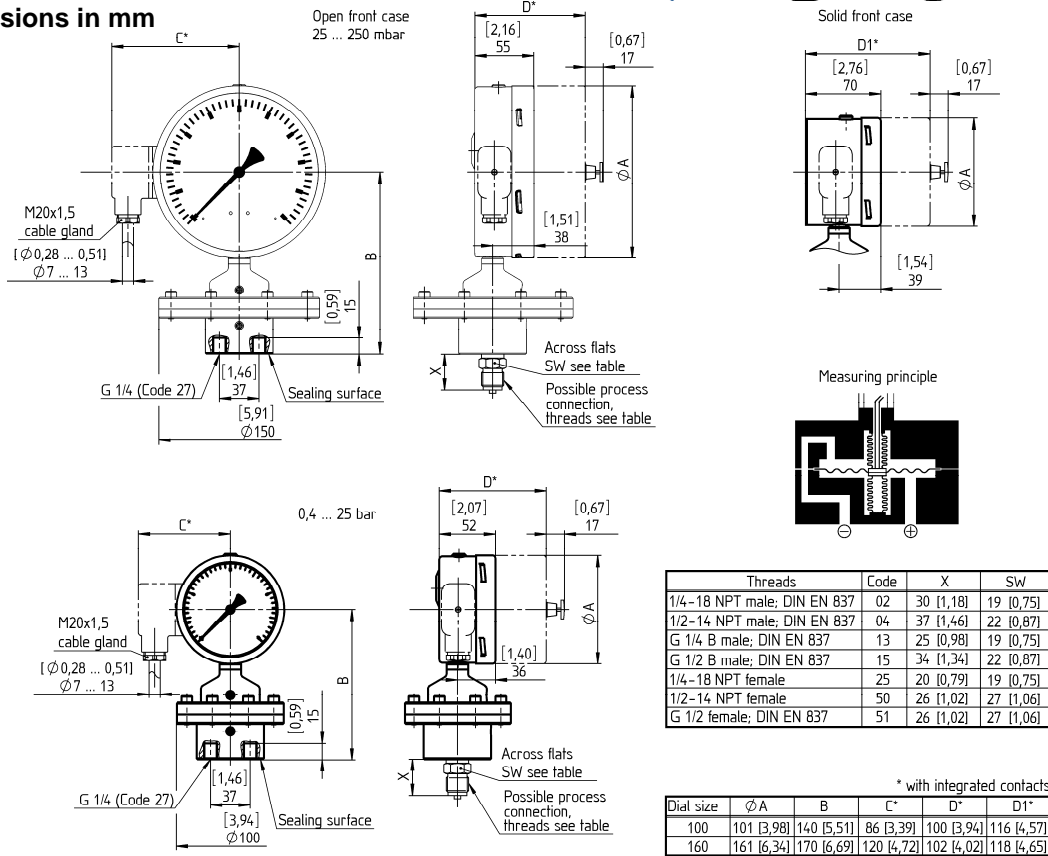
Machine and apparatus construction

Food and beverage industry

Pulp and paper industry

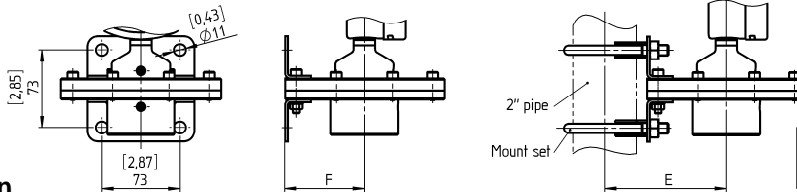
Technical specification	F5509				F6509			
	100		160		100		160	
Construction	Open front cylindrical case with blow out disc at the back				Solid front safety pattern cylindrical case with blow out at the back			
Zero adjustment	Externally, at the top of the case							
Measuring principle	Diaphragm (see back side)							
Range in mbar	25	40	60	100	160	250	400	
in bar	0,6	1	1,6	2,5	4	6	10	16 25
Max. static pressure	Range < 400 mbar static pressure = 10 bar (10 times F.S. load at one side)							
	Range ≥ 400 mbar static pressure = 25 bar (10 times F.S. load at one side)							
Pressure type	Differential							
Process connection	G 1/4 B male, G 1/4 female, G 1/2 B male, G 1/2 female							
	1/4 NPT male, 1/4 NPT female, 1/2 NPT male, 1/2 NPT female, others on request							
Connection location	Lower							
Material								
Pressure connection	Stainless steel 316L (1.4404)							
Pressure chamber	Stainless steel 316L (1.4404), Viton O-ring, EPDM on request							
Measuring diaphragm	≤ 400 mbar stainless steel 316Ti (1.4571)							
	≥ 0,6 bar Duratherm 2.4781 (NiCrCo alloy)							
Bellows	Stainless steel 316Ti (1.4571)							
Case/bayonet ring	Stainless steel 304 (1.4301)							
Window	Laminated safety glass							
Dial	Aluminum, black markings on white background							
Pointer	Aluminum, black, optional red set hand or maximum pointer							
Movement	Stainless steel 304/303 (1.4301/1.4305)							
Accuracy	Class 2,5 (2,5 % F.S.), optional (for ranges ≥ 60 mbar) class 1,6 (1,6 % F.S.)							
Permissible								
Ambient temperature	-25 ... 85 °C							
Medium temperature	Max. 100 °C							
Storage temperature	-40 ... 60 °C							
Effect	Max. 0,3 % / 10 K							
Protection according EN 60 529/IEC 529	IP54 (dry), IP65 (liquid filled), optional IP65 for dry gauges							
Filling liquids	Glycerin, silicone, others on request							
Mounting	Direct, optional wall or 2" pipe mounting, others on request							
Weight dry/filled in kg	range	≤ 400 mbar 9/9,5		≤ 400 mbar 9,4/10		≤ 400 mbar 9/9,5		≤ 400 mbar 9,4/10
		≥ 600 mbar 4/4,5		≥ 600 mbar 4,4/5		≥ 600 mbar 4/4,5		≥ 600 mbar 4,4/5
Accessories, options	3 or 5 way manifolds, valves, gauges with contacts (see data sheet G1.K55/E)							

## General dimensions in mm



Wall mounting

Pipe mounting



Range	E	F
25 ... 250 mbar	114 [4,47]	74 [2,91]
0,4 ... 25 bar	91 [3,59]	51 [2,01]

## Order information

Size	Type	System material	Execution	Process connection	Connection orientation	Range	Engineer-in unit	Filling/contacts	Options	
(100) 100 mm	F5509	<b>(S) Pressure compartment</b> 316L (1.4404) <b>Diaphragm</b> ≤ 400 mbar 316Ti (1.4571), ≥ 0,6 bar <b>Duratherm</b> <b>Bellows</b> 316Ti (1.4571)	(=) IP54 standard case	(27) G ¼ female	(L) Lower	0/ 25 0/ 40 0/ 60 0/ 100 0/ 160 0/ 250 0/ 400	<b>MBAR</b>       <b>BAR</b>	(=) Standard no filling  <b>(GV)</b> Silicone (admissible for inductive con- tacts)  <b>(GT)</b> Napvis (admissible for magnetic spring contacts)  <b>(GR)</b> Glycerin  ( ) Contact type and function (see data sheet G1.K55/E)	<b>(NH)</b> Tagging wired  <b>(DA)</b> Dial marking  <b>(FW)</b> Wall mounting bracket  <b>(TM)</b> 2" pipe mounting bracket  <b>(EP)</b> Maximum pointer adjustable  <b>(LJ)</b> Field fillable IP65 (only for execution "=")	
(160) 160 mm	F6509		(L) Liquid filled IP65	(02) ¼ NPT male  (04) ½ NPT male  (13) G ¼ B male  (15) G ½ B male  (25) ¼ NPT female  (50) ½ NPT female  (51) G ½ female		0/ 0,6 0/ 1 0/ 1,6 0/ 2,5 0/ 4 0/ 6 0/ 10 0/ 16 0/ 25				max. static pressure for < 400 mbar 10 bar for ≥ 400 mbar 25 bar  psi and others on request  compound ranges on re- quest

## Order example

Size	Type	System material	Execution	Process connection	Connection orientation	Range	Engineering unit	Filling/contacts	Options
100	F5509	S	L	27	L	0/16	BAR	GV	TM

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