

# Stainless steel differential pressure gauge

## Model F5503

**Max. static pressure 400 bar**

Nominal size 100 mm or 160 mm

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

### Features

- Stainless steel case and wetted parts
- Static pressure 40 bar, 100 bar, 160 bar, 250 bar and 400 bar optional, one side load permitted
- Protection IP54 or IP65
- Chamber purge and bleed connection available
- High corrosive resistance
- Dry or liquid filled
- Dual diaphragm, solid front not required

### Ranges

0 ... 40 mbar up to 0 ... 40 bar

### Applications

Chemical and petrochemical industry  
Machine and apparatus construction  
Food and beverage industry  
Pulp and paper industry



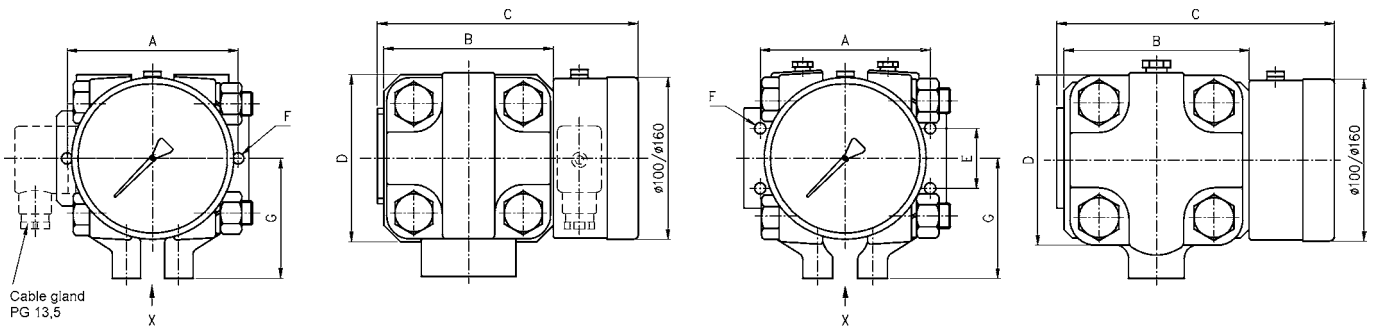
Technical specification	F5503				
Dial size [mm]	100		160		
Construction	Cylindrical case				
Zero adjustment	Externally, at the top of the case				
Measuring principle	Dual diaphragm (see back side), safety design, solid front not required				
Range [mbar]	40 60 100 160 250 400 mbar ranges not for static pressure 400 bar				
[bar]	0,6 1 1,6 2,5 4 6 10 16 25 40				
Max. static pressure [bar]	40 bar, optional 100 bar, 160 bar <sup>1)</sup> , 250 bar <sup>1)</sup> or 400 bar <sup>1)</sup> <span style="float: right;"><sup>1)</sup> Not for system material code HH</span>				
Overload capability	Static pressure is also maximum pressure allowed on one side				
Pressure type	Differential				
Process connection	Flange for direct mounted valves 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), optional Hastelloy C Pressure chamber: Stainless steel 316L (1.4404), optional Hastelloy C (max. PN100), Viton O-ring, Teflon on request Measuring diaphragm: > 1 bar stainless steel 316Ti (1.4571), optional Hastelloy C or Monel ≤ 1 bar Duratherm (NiCrCo alloy), optional Hastelloy C or Monel Case/bayonet ring: Stainless steel 304 (1.4301), optional 316L (1.4404) Window: Laminated safety glass Dial: Aluminum, black markings on white background Pointer: Aluminum, black, optional red set hand or maximum pointer				
Accuracy	Class 1,6 (1,6 % F.S.), optional 1 % or 0,5 % unidirectional				
Permissible	Ambient temperature: -25 ... 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	IP54 (dry), IP65 (liquid filled or field fillable)				
Filling liquids	Glycerin, silicone, others on request				
Mounting	Direct, optional wall or 2" pipe mounting (not for ranges ≤ 400 mbar), others on request				
Weight dry/filled [kg]	Max. static pressure ≤ 400 mbar ≥ 600 mbar	40 bar or 100 bar 9/9,5 4/4,5	160 bar, 250 bar or 400 bar 17/17,5 6/6,5	40 bar or 100 bar 9,4/10 4,5/5	160 bar, 250 bar or 400 bar 17,3/18,5 6,3/7,5
Accessories, options	3 or 5 way remote or direct mounted manifolds, valves, gauges with contacts (see data sheet G1.K55/E), diaphragm seals, NACE/ISO 15156				

## General dimensions [mm]

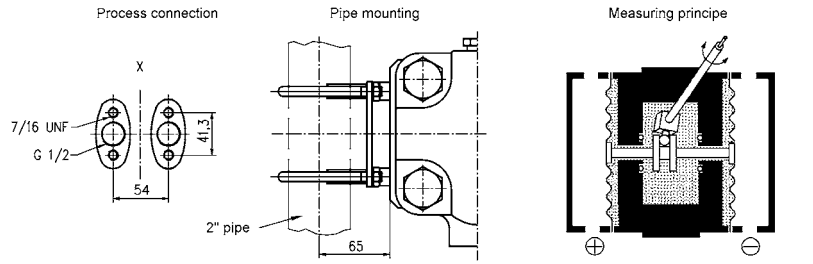
Max. static pressure PN100

Max. static pressure PN400

(for ranges ≤ 400 mbar PN250)



	A	B	C	D	E	F	G
40-400 mbar max. PN100	132	141	197	141	60	4x Ø9	101
max. PN250	170	175	231	170	60	4x Ø11	120
0,6-40 bar max. PN100	110	93	149	93	-	2x Ø9	76,0
max. PN400	132	113	169	105	-	2x Ø9	86,5



## Order information

Size	System material	Execution	Process connection	Connection orientation	Range	Engineering units	Filling/case/contacts	Options
(100) 100 mm	(S) Pressure chamber 316L (1.4404)	(=) IP54 standard case	(27) G ¼ female	(L) Lower	0/ 40 0/ 60 0/100 0/160 0/250 0/400	(MBAR)	(=) Standard no filling	(NH) Tagging wired
(160) 160 mm	Diaphragm > 1 bar 316Ti (1.4571), ≤ 1 bar Duratherm	(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 and flange for direct mounted valves		0/ 0,6 0/ 1 0/ 1,6 0/ 2,5 0/ 4 0/ 6 0/ 10 0/ 16 0/ 25 0/ 40	(BAR)	(GV) Silicone (GR) Glycerin (YW) Case material 316L (1.4404) ( ) Contact type and function (see data sheet G1.K55/E)	(6B) Oxygen service (body filled with halocarbon) (CS) Dual scale (DA) Dial marking (FW) Wall mounting bracket (PT) PTFE gasket (TB) Purge and vent connection G 1/8 (TM) 2" pipe mounting bracket (not for ranges ≤ 400 mbar with static pressure ≥ PN160) (LJ) Field fillable, IP65 (only for execution =)
	(SH) Pressure chamber 316L (1.4404) Diaphragm Hastelloy C							(PN100) Max. static pressure 100 bar (PN160) Max. static pressure 160 bar <sup>1)</sup> (PN250) Max. static pressure 250 bar <sup>1)</sup> (PN400) Max. static pressure 400 bar <sup>1)</sup> (not for ranges ≤ 400 mbar)
	(HH) Pressure chamber and diaphragm Hastelloy C (max. PN100)							<sup>1)</sup> not for system material code HH
	(SM) Pressure chamber 316L (1.4404) Diaphragm Monel only ranges ≥ 0,6 bar				max. static pressure 40 bar	psi and others on request compound ranges on request		

## How to order

Size	Type	System material	Execution	Process connection	Connection orientation	Range	Engineering unit	Filling/case/contacts	Option
100	F5503	S	=	51	L	0/40	MBAR	=	NH

DRESSER EUROPE GmbH Instruments

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  
„206“ ZA Le Mandinet Rue des Campanules  
F-77185 Lognes  
Tel.: +33 (0) 1 60 37 25 30, Fax: +33 (0) 1 60 37 25 39

Website: www.dresserbae.de

United Kingdom  
East Gillibrands  
Skelmersdale, Lancashire WN8 9TU  
Tel.: +44 (0) 16 95 52 600, Fax: +44 (0) 16 95 52 693

e-Mail: sales@dresserbae.de