

Stainless steel differential pressure gauge

Model F5503

Max. static pressure 400 bar

Nominal size 100 mm or 160 mm

Accuracy: Class 1,6 (DIN), 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

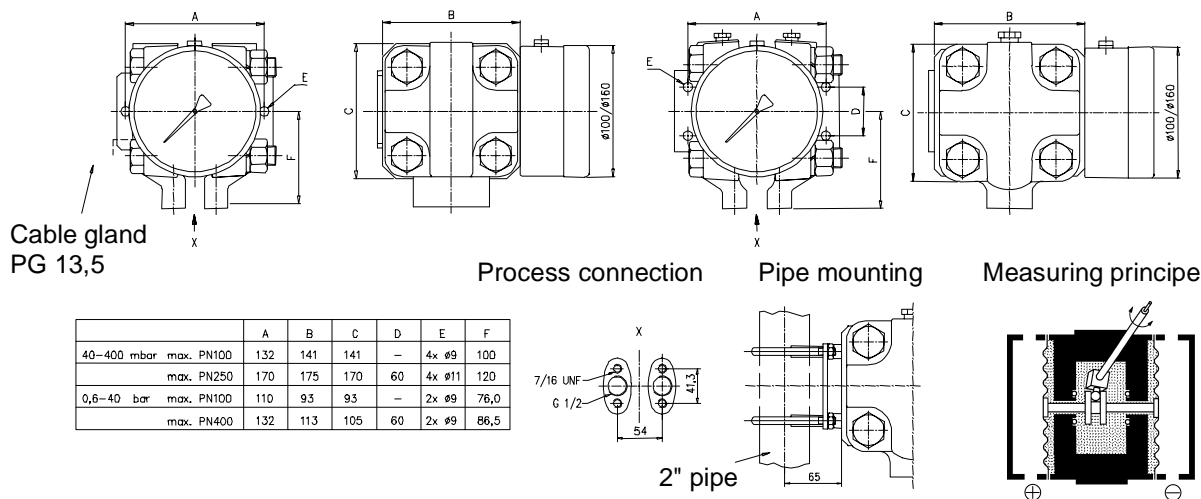
Pulp and paper industry

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 ¹⁾ , 250 bar ¹⁾ or 400 bar ¹⁾ . ¹⁾ Not for system material code HH																		
Overload capability	Static pressure is also maximum pressure allowed on one side																		
Pressure type	Differential																		
Process connection	Flanged according DIN 19 209 G ¼ B male, G ¼ female, G ½ B male, G ½ female ¼" NPT male, ¼" NPT female, ½" NPT male, ½" NPT female, others on request																		
Connection location	Lower																		
Material	Pressure connection: Stainless steel AISI 316L (1.4404), optional Hastelloy-C Pressure chamber: Stainless steel AISI 316L (1.4404), optional Hastelloy-C (max. PN 100), Viton O-ring, Teflon on request Measuring diaphragm: > 1 bar stainless steel AISI 316Ti (1.4571), optional Hastelloy-C or Monel Case/bayonet ring: ≤ 1 bar Duratherm (NiCrCo alloy), optional Hastelloy-C or Monel Window: Stainless steel AISI 304 (1.4301), optional AISI 316 (1.4401) Dial: Laminated safety glass 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), optional IP65 for dry gauges																		
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]	<table border="1"> <tr> <td>max. static pressure</td> <td>40 bar or 100 bar</td> <td>160 bar, 250 bar or 400 bar</td> <td>40 bar or 100 bar</td> <td>160 bar, 250 bar or 400 bar</td> </tr> <tr> <td>≤ 400 mbar</td> <td>9/9,5</td> <td>17/17,5</td> <td>9,4/10</td> <td>17,3/18,5</td> </tr> <tr> <td>≥ 600 mbar</td> <td>4/4,5</td> <td>6/6,5</td> <td>4,5/5</td> <td>6,3/7,5</td> </tr> </table>				max. static pressure	40 bar or 100 bar	160 bar, 250 bar or 400 bar	40 bar or 100 bar	160 bar, 250 bar or 400 bar	≤ 400 mbar	9/9,5	17/17,5	9,4/10	17,3/18,5	≥ 600 mbar	4/4,5	6/6,5	4,5/5	6,3/7,5
max. static pressure	40 bar or 100 bar	160 bar, 250 bar or 400 bar	40 bar or 100 bar	160 bar, 250 bar or 400 bar															
≤ 400 mbar	9/9,5	17/17,5	9,4/10	17,3/18,5															
≥ 600 mbar	4/4,5	6/6,5	4,5/5	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																		

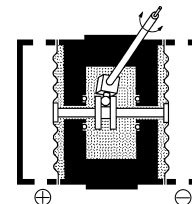
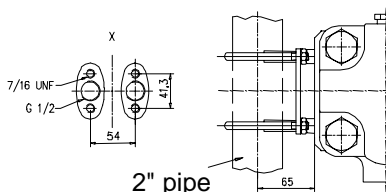
General dimensions [mm]

Max. static pressure PN100

Max. static pressure PN400
(for ranges ≤ 400 mbar PN250)



	A	B	C	D	E	F
40-400 mbar max. PN100	132	141	141	-	4x #9	100
max. PN250	170	175	170	60	4x #11	120
0,6-40 bar max. PN100	110	93	93	-	2x #9	76,0
max. PN400	132	113	105	60	2x #9	86,5



Order information

Size	System material	Execution	Process connection	Connection orientation	Range	Engineering units	Filling/contacts	Options
(100) 100 mm	(S) Pressure chamber AISI 316L (1.4404)	(=) IP54 standard case	(27) G ¼ female	(L) Lower	0/ 40	(MBAR)	(=) Standard no filling	(NH) Tagging wired
(160) 160 mm	(SH) Pressure chamber AISI 316L (1.4404)	(L) Liquid filled IP65	(02) ¼" NPT male		0/ 60		(GV) Silicone	(6B) Oxygen service (body filled with halocarbon)
	(HH) Pressure chamber and diaphragm Hastelloy-C (max. PN100)		(04) ½" NPT male		0/ 100		(GR) Glycerin	(CS) Dual scale
	(SM) Pressure chamber AISI 316L (1.4404)		(13) G ¼ B male		0/ 160	(BAR)	(YW) Case material AISI 316 (1.4401)	(DA) Dial marking
	(Diaphragm) Hastelloy-C		(15) G ½ B male		0/ 250		() Contact type and function (see data sheet G1.K55/E)	(FW) Wall mounting bracket
			(50) ½" NPT female		0/ 400			(PT) PTFE gasket
			(51) G ½ female and flanged according DIN 19 209 (standard)		0/ 0,6			(TB) Purge and vent connection G 1/8
					0/ 1			(TM) 2" pipe mounting bracket (not for ranges ≤ 400 mbar with static pressure ≥ PN160)
					0/ 1,6			(LJ) Field fillable (only for execution =)
					0/ 2,5			(PN100) max. static pressure 100 bar
					0/ 4			(PN160) max. static pressure 160 bar ¹⁾
					0/ 6			(PN250) max. static pressure 250 bar ¹⁾
					0/ 10			(PN400) max. static pressure 400 bar ¹⁾ (not for ranges ≤ 400 mbar)
					0/ 16			¹⁾ Not for system material code HH
					0/ 25			
					0/ 40			
						psi and others on request		
					max. static pressure 40 bar	compound ranges on request		

How to order

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