

Stainless steel differential pressure gauge

Model F5503-HP

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 160 bar, 250 bar and 400 bar, one side load permitted
- Protection IP65
- Chamber purge and bleed connection
- High corrosive resistance
- Dry or liquid filled
- Dual diaphragm, safety design as solid front


Ranges

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

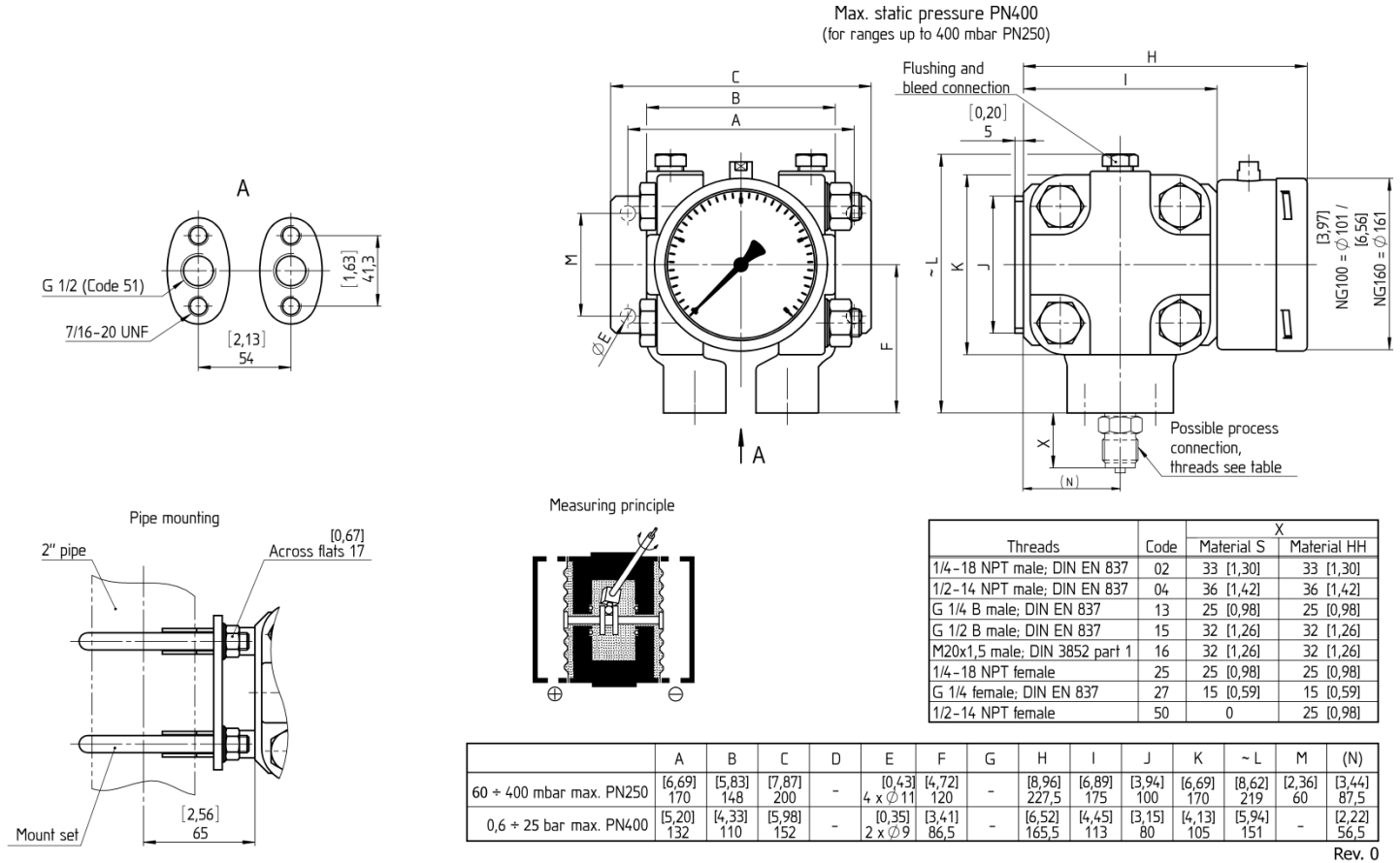
Applications

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



Technical specification		F5503-HP	
Dial size in mm		100	160
Construction	Cylindrical case		
Zero adjustment	Externally, at the top of the case		
Measuring principle	Dual diaphragm (principle see back side), safety design similar to solid front		
Range in mbar	40 60 100 160 250 400		
in bar	0,6 1 1,6 2,5 4 6 10 16 25 40		
Max. static pressure	160 bar, 250 bar or 400 bar ¹⁾ ¹⁾ Ranges ≤ 400 mbar only on request		
Overload capability	Static pressure is also maximum pressure allowed on one side		
Pressure type	Differential		
Process connection	Flange for direct mounted manifolds similar to DIN EN 61518 with G ½ female G ¼ B male, G ¼ female, G ½ B male, ¼ NPT male, ¼ NPT female, ½ NPT male, ½ NPT female, others on request		
Purge and bleed connection	On top of both pressure chambers, G ¼ with plug		
Connection location	Lower		
Material			
Pressure connection	Stainless steel 316L (1.4404), optional Hastelloy C-276		
Pressure chamber	Stainless steel 316L (1.4404), optional Hastelloy C-276, Viton O-ring, Teflon on request		
Measuring diaphragm	≤ 400 mbar stainless steel 316Ti (1.4571), optional Hastelloy C276 > 400 mbar Duratherm 2.4781 (NiCrCo alloy), optional Hastelloy C276 (ranges ≥ 4 bar with Hastelloy foil, not suitable for vacuum)		
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 % according to ASME B40.100 unidirectional		
Permissible			
Ambient temperature	-20 ... 60 °C		
Medium temperature	Max. 85 °C		
Storage temperature	-40 ... 60 °C		
Effect	Max. 0,3 % / 10 K		
Conformity according to RL 2014/34/EU appendix X for mechanical equipment in potential hazardous areas	Optional, Marking  II 2 GD c 95 °C IP65 File no. 35106158 at notified body 0044, TÜV NORD CERT		
Protection according to EN 60 529/IEC 529	IP65		
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 in kg			
≤ 400 mbar	17/17,5		17,3/18,5
≥ 600 mbar	6/6,5		6,3/7,5
Accessories, options	3 or 5 way remote or direct mounted manifolds, gauges with contacts (see data sheet G1.K55/E), diaphragm seals, NACE/ISO 15156		

General dimensions in mm



Rev. 0

Order information

Size	System material	Execution	Process connection	Connection orientation	Range	Engineering unit	Filling/case/contacts	Options
(100) 100 mm	(S) Pressure chamber 316L (1.4404) Diaphragm ≤ 400 mbar 316Ti (1.4571), > 400 mbar Duratherm ¹⁾	(=) Dry 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	(SH) Pressure chamber 316L (1.4404) Diaphragm Hastelloy C-276 ¹⁾	(L) Liquid filled	(02) ¼ NPT male		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 (suitable for inductive contacts)	(YW) Case material 316L (1.4404)
	(HH) Pressure chamber and diaphragm Hastelloy C-276 ¹⁾		(04) ½ NPT male				(GT) Napvis (suitable for magnetic spring contacts)	(PT) PTFE gasket
			(13) G ¼ B male				(GR) Glycerin	(CS) Dual scale
			(15) G ½ B male				() Contact type and function (see data sheet G1.K55/E)	(DA) Dial marking
			(25) ¼ NPT female					(FW) Wall mounting bracket
			(50) ½ NPT female					(TM) 2" pipe mounting bracket (not for ranges ≤ 400 mbar)
			(51) G ½ female and flange for direct mounted valves					(LJ) Field fillable, IP65 (only for execution =)
								(PN160) Max. static pressure 160 bar
								(PN250) Max. static pressure 250 bar
								(PN400) Max. static pressure 400 bar (ranges ≤ 400 mbar only on request)
								(ATEX) ATEX listed

¹⁾ ranges ≤ 400 mbar with PN400 only on request

psi and others on request

compound ranges on request

Order example

Size	Type	System material	Execution	Process connection	Connection orientation	Range	Engineering unit	Filling/case/contacts	Option
100	F5503-HP	S	=	51	L	0/1,6	BAR	=	PN400

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