

Data Sheet

5503 Differential Pressure Gauge

FEATURES

- Stainless steel case
- Dry or liquid filled
- Available with diaphragm seals
- Electric contacts (optional)
- Flow measurement dial (optional)
- Ranges from 10 IWD to 1,000 psid

TYPICAL USES

- Refineries
- Chemical and petrochemical plants
- Water and wastewater pressure control
- Mining and metals
- Filtration monitoring, level and flow measurement



5503
100mm (4"),
160 mm (6") dial sizes



SPECIFICATIONS

Accuracy: ±1.6% of span (STD.), ±0.5% upscale (OPT.)

Dial Sizes: 100 mm (4") or 160 mm (6")

Static Pressure: 1,450 psi (STD.)
3,625 psi for ranges <6 psid (OPT.)
5,801 psi for ranges ≥8 psid (OPT.)

Process Connection: ¼ NPT, ½ NPT, G ¼ B Male

Process Connection Location: Lower

Case Style: Open front case

Pointer: Black painted aluminum

Weather Protection: IP65: Dry case (STD.)
IP66: Hermetically sealed (OPT.)

Mounting: Stem (STD.), wall, pipe (OPT.)

Liquid Fill: Glycerin (STD.), silicone, Halocarbon (OPT.)

Set Point: High and Low, Double High, Double Low

Certificates: NACE, EN 10204 3.1(OPT.)

Approvals: CRN, CE (STD.), ATEX (OPT.)
ATEX Conformity according to RL 2014/34/EU appendix X for mechanical equipment in potential hazardous areas.



11 2 GD c 95°C IP65 (Ta -20°C ... +60°C) File No. 35106158 at notified body 0044 TUV NORD CERT

NON-WETTED COMPONENTS

Case	Ring	Window
304 SS open front case 316 SS (OPT.)	Bayonet ring	Safety glass

KEY BENEFITS

- High static pressure with low differential pressure
- Perfect solution for challenging applications and installation requirements
- Robust design with dual diaphragms for safety
- NACE compliant (OPT.)
- Designed for harsh services

WETTED COMPONENTS

Diaphragm	Housing	O-Ring
316Ti: 15 IW to 6 psid	316L SS	Viton®
Duratherm®: 8 psid to 40 psid	316L SS	Viton®
Inconel®: >40 psid	316L SS	Viton®
Hastelloy® C276	Hastelloy® C276	Viton®
Hastelloy® C276	316L SS	Viton®
Monel®: 10 psid and above	316L SS	Viton®

MIN/MAX TEMPERATURE LIMITS

Version	Ambient	Process	Storage
Dry	-4°F to 176°F (-20°C to 80°C)	-4°F to 185°F (-20°C to 85°C)	-40°F to 140°F (-40°C to 60°C)
Glycerin Fill	20°F to 150°F (-7°C to 66°C)	20°F to 150°F (-7°C to 66°C)	0°F to 150°F (-18°C to 66°C)
Silicone Fill	-40°F to 150°F (-40°C to 66°C)	-40°F to 200°F (-40°C to 93°C)	-40°F to 150°F (-40°C to 66°C)

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ORDERING CODE	Example:	10	5503	SS	L	02	L	XC4	10IW
Dial Size									
10 - 100mm (4")		10							
16 - 160mm (6")									
Model									
5503 - 304 Stainless steel open front case			5503						
Diaphragm & Housing Material									
SS - 316 SS diaphragm and housing for ranges of 5 psi and below High strength cobalt alloy (Duratherm 600®) for ranges of 10 psi and above				SS					
HS - Hastelloy® C 276 diaphragm, 316 stainless steel housing									
HH - Hastelloy® C 276 diaphragm and housing (NACE compliant)									
PS - Monel® diaphragm and 316 stainless steel housing									
Case Fill									
D - Dry									
L - Glycerin fill					L				
Process Connection									
02 - ¼ NPT Male, ¼ - 18 NPT Male; DIN EN837						02			
04 - ½ NPT Male, ½ - 14 NPT Male; DIN EN837									
13 - G ¼ B Male, DIN EN837									
15 - G ½ B Male; DIN EN837									
25 - ¼ NPT, ¼ - 18 NPT Female									
27 - G ¼ B Female, DIN EN837									
50 - ½ NPT, ½ - 14 NPT Female									
51 - G ½ Female									
Process Connection Location									
L - Lower							L		
Options (If choosing an option(s) must include an "X")									
GV - Silicone fill								X	
GX - Halocarbon fill									
FW - Wall mounting bracket									
TM - Pipe mounting bracket									
YW - 316 stainless steel case and ring									
DA - Dial marking									
LJ - Hermetically sealed case (IP66)									
ED - Dual setpoint, high and low contacts (Specify magnetic or inductive contacts)									
EE - Dual setpoint, double high contacts (Specify magnetic or inductive contacts)									
EF - Dual setpoint, double low contacts (Specify magnetic or inductive contacts)									
CD-5 - Certificate of Conformance to NACE (Hastelloy C diaphragm & housing required) (with Kalrez O-Rings STD.) (must be ordered as a separate line item)									
C4 - Individual calibration chart								C4	
AX - ATEX Listed									
C3 - Material Certificate to EN 10204 3.1									
6B - Oxygen Service (Teflon coated Viton o-rings standard)									
SP - Static pressure to 3,625 psi for ranges <6 psid or 5,801 psi ranges >8 psid									
AJ - Accuracy ±0.5% Upscale									
MN - Bonded stainless steel tag									
NH - Stainless steel wired tag									
NN - Paper tag bonded to case									
Range (coding examples only, see range table on page 3 for all standard ranges)									
10IW - 10 IWD									10IW

5503 Differential Pressure Gauge

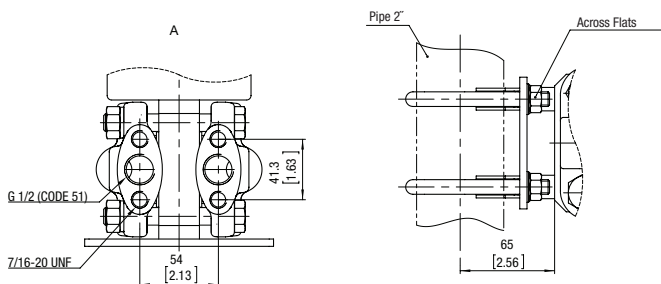
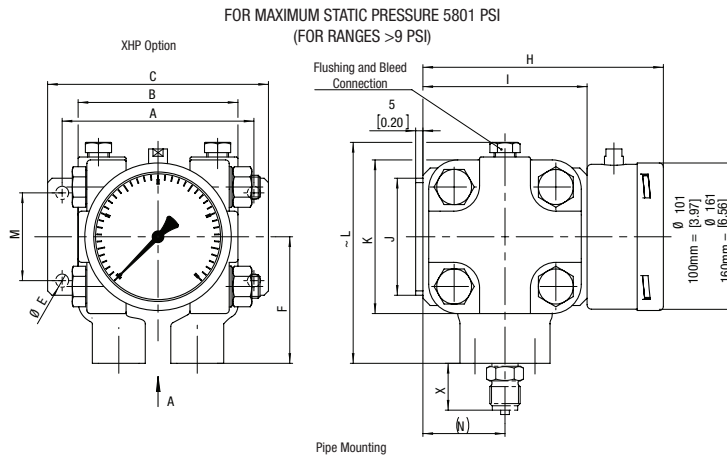
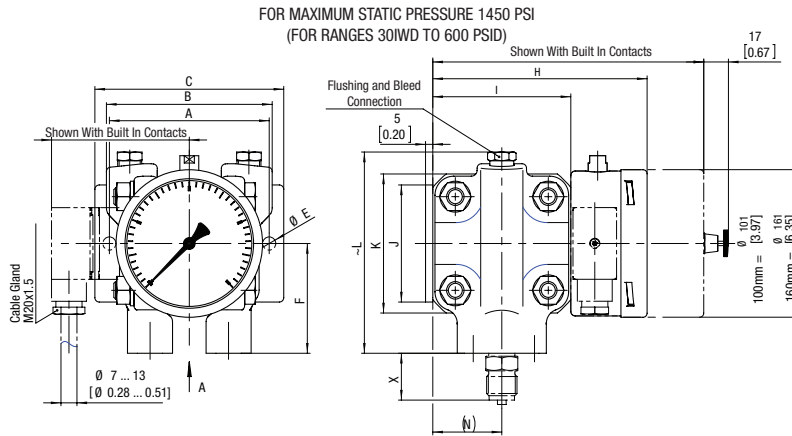
5503 Differential Pressure Ranges			
psid	mbard	bard	IWD
-	-	-	10IW
-	-	-	15IW
-	40MB	-	-
-	60MB	-	-
-	-	-	30IW
-	100MB	-	-
-	160MB	-	60IW
-	250MB	-	100IW
-	-	-	150IW
-	400MB	-	-
-	-	-	200IW
1#	-	-	-
5#	-	-	-
10#	-	0.6BR	-
15#	-	1BR	-
-	-	1.6BR	-
30#	-	-	-
-	-	2.5BR	-
60#	-	4BR	-
-	-	6BR	-
100#	-	-	-
-	-	10BR	-
160#	-	-	-
200#	-	-	-
-	-	16BR	-
300#	-	-	-
-	-	25BR	-
400#	-	-	-
600#	-	-	-

Data Sheet

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DIMENSIONS in [] are inches

For reference only, consult Ashcroft for specific dimensional drawings



Weight (lbs)

	100mm	160mm
For Ranges ≤6 psid		
Dry	20	21
Liquid Filled	21	22
For Ranges ≥8 psid		
Dry	9	10
Liquid Filled	10	11

Weight with XSP High Static Option (lbs)

	100mm	160mm
For Ranges ≤6 psid		
Dry	38	39
Liquid Filled	39	41
For Ranges ≥8 psid		
Dry	14	14
Liquid Filled	15	17

Range	Static Pressure	A	B	C	D	E	F	G	H	I	J	K	~L	M	(N)
<6 psid	1,450 psi	132 [5.20]	108 [4.25]	152 [5.98]	120 [4.72]	4 X Ø 9 [0.35]	100 [3.94]	239.5 [9.43]	193.5 [7.62]	141 [5.55]	80 [3.15]	141 [5.55]	181 [7.11]	60 [2.36]	70.5 [2.78]
≥8 psid	1,450 psi	110 [4.33]	114 [4.49]	130 [5.12]	90 [3.54]	2 X Ø 9 [0.35]	75 [2.95]	184.5 [7.26]	145.5 [5.73]	93 [3.66]	80 [3.15]	93 [3.66]	136 [5.33]	-	46.5 [1.83]
Range	XSP High Static Option	A	B	C	D	E	F	G	H	I	J	K	~L	M	(N)
<6 psid	3,625 psi	170 [6.69]	148 [5.83]	200 [7.87]	-	4 X Ø 11 [0.43]	120 [4.72]	-	227.5 [8.96]	175 [6.89]	100 [3.94]	170 [6.69]	219 [8.62]	60 [2.36]	87.5 [3.44]
≥8 psid	5,801 psi	132 [5.20]	110 [4.33]	152 [5.98]	-	2 X Ø 9 [0.35]	86.5 [3.41]	-	165.5 [6.52]	113 [4.45]	80 [3.15]	105 [4.13]	151 [5.94]	-	56.5 [2.22]