

# Diaphragm type pressure gauge

## Model P5500 and P6500

According EN 837-3  
Nominal size 100 mm or 160 mm  
Accuracy: Class 1,6



### Features


- Stainless steel construction
- Suitable for corrosive environments
- Protection IP66
- Usable to full scale
- Overload protection up to 5 times F.S.
- Dry or liquid filled

### Ranges

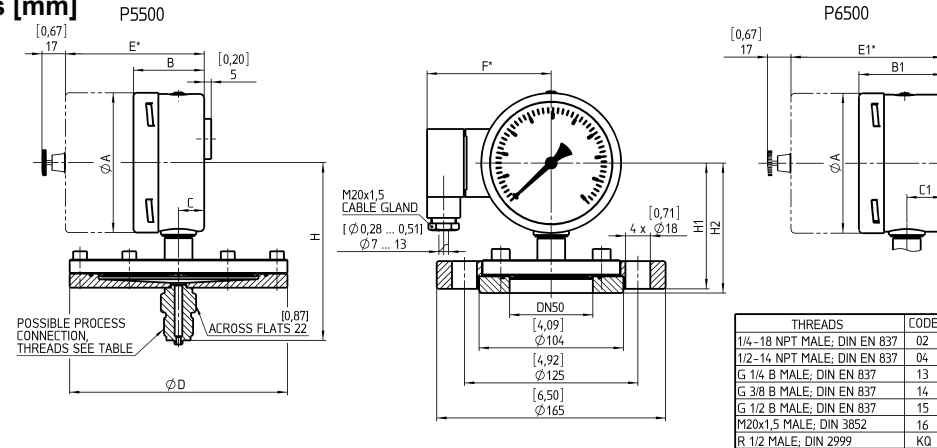
-16 ... 0 mbar up to 0 ... 25 bar  
-6 ... 0 in. H<sub>2</sub>O up to 0 ... 300 psi

### Applications

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

Technical specification	P5500		P6500	
	100	160	100	160
Dial size [mm]				
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	Optional with micrometer pointer or external zero adjustment (recommended for all liquid filled gauges)			
Measuring principle	Horizontal diaphragm			
Range [mbar]	16 25 40 60 100 160 250 400 -16/0 -25/0 -40/0 -60/0 -100/0 -160/0 -250/0 -400/0			
[bar]	0,6 1,0 1,6 2,5 4 6 10 16 25 -1/0 -1/0,6 -1/1,5 -1/3 -1/5 -1/9 -1/15			
Overpressure limit	Continues service up to full scale, alternating service up to 90 % of range 5 times F.S., but max. 40 bar			
Pressure type	Gauge, vacuum and compound			
Process connection	G ¼ B male, G 3/8 B male, G ½ B male according to EN 837 ¼ NPT male, ½ NPT male according ANSI/ASME B1.20.1 Direct flange DN20/PN40, DN25/PN40, DN50/PN40 Open flange with steel cover flange DN50 Direct flange 1", 1½", 2", 3" 150 lbs RF, 1" 300 lbs RF according ANSI/ASME Others on request			
Connection location	Lower			
Material	Stainless steel 316L (1.4404), optional PTFE lining > 100 mbar Duratherm 2.4781 (NiCrCo alloy), ≥ 16 bar Inconel 718 (2.4668), optional with PTFE-lining or Hastelloy C-276 ≤ 100 mbar stainless steel 316Ti (1.4571), Hastelloy C-276			
Sealing	Viton O-ring			
Case/bayonet ring	Stainless steel 316L (1.4404)			
Window	Laminated safety glass, optional acrylic glass			
Dial	Aluminum, black markings on white background			
Pointer	Aluminum, black, optional micrometer adjustment, red set hand or maximum pointer			
Movement	Stainless steel 304 (1.4301)			
Accuracy	Class 1,6 (1,6 % F.S.), with PTFE-lining class 2,5 (2,5 % F.S.)			
Permissible	-20 ... 60 °C, optional ATEX -20 ... 60 °C Max. 85 °C -40 ... 70 °C Max. 0,5 % / 10 K			
Ambient temperature				
Medium temperature				
Storage temperature				
Effect				
Conformity according to RL 2014/34/EU appendix X for mechanical equipment in potential hazardous areas	 II 2G Ex h IIC T4 Gb II 2D Ex h IIC T95°C Db Ta = -20°C to +60°C Optional, Marking File No. 8000395287 at notified body 0044, TÜV NORD CERT			
Protection according EN 60 529/IEC 529	IP66			
Filling liquids	Glycerin, silicone, others on request, only available for ranges ≥ 100 mbar			
Mounting	Standard stem or flange			
Weight ≤ 400 mbar / > 400 mbar [kg]	2,3/1,8	3,8/3,4	2,3/1,8	3,8/3,4
Accessories, options	Valves, gauges with contacts (see G1.K55/E)			

### General dimensions [mm]

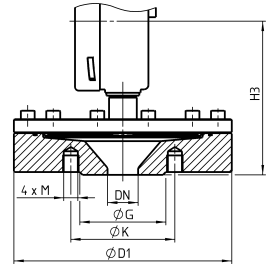


\* WITH INTEGRATED CONTACTS

PRESSURE RANGE	SIZE	Ø A	B	B1	C	C1	Ø D	E*	E1*	F*	H
≥ 0,6 bar	100	[3,97]	[2,01]	[2,38]	[0,73]	[1,02]	[3,90]	[3,94]	[4,33]	[3,50]	[5,04]
	160	[6,35]	[1,96]	[2,52]	[0,76]	[1,11]	[3,90]	[3,94]	[4,49]	[4,69]	[6,22]
≤ 400 mbar	100	[3,97]	[2,01]	[2,38]	[0,73]	[1,02]	[6,18]	[3,94]	[4,33]	[3,50]	[4,92]
	160	[6,35]	[1,96]	[2,52]	[0,76]	[1,11]	[6,18]	[3,94]	[4,49]	[4,69]	[6,10]

RANGE DN	≥ 0,6 bar	≤ 400 mbar	Ø G	H3 NG 100	H3 NG 160	Ø K 4 x M
DN20/PN40	[4,13]	[2,28]	58	[2,95]	[2,95]	M12
DN25/PN40	[4,53]	[6,18]	68	[4,17]	[5,35]	M12
DN50/PN40	[6,50]	[6,50]	102	[4,02]	[4,92]	M16
DN1" 150 lbs	[4,25]	[4,57]	108	[5,75]	[5,75]	1/2-13 UNC
DN1" 300 lbs	[4,25]	[4,25]	123,9	[5,79]	[5,79]	5/8-11 UNC
DN2" 150 lbs	[6,00]	[3,62]	157	[4,29]	[5,47]	5/8-11 UNC
DN3" 150 lbs	[7,52]	[5,00]	190,9	[4,29]	[5,47]	5/8-11 UNC

FLANGE DN50 SIZE	H1	H2
100	[4,61]	[4,72]
160	[5,79]	[5,91]



### Order information

Size	Type	System material	Execution	Process connection	Connection orientation	Range	Engineering units	Filling	Options
(100) 100 mm	P5500	(S) Diaphragm 316Ti (1.4571) or Duratherm or Inconel, flange 316L (1.4404)	(D) IP66	(02) ¼ NPT male	(L) Lower	-16/ 0	MBAR	(=) Standard no filling	(6B) Cleaned for Oxygen service
(160) 160 mm	P6500	(ST) Diaphragm 316Ti (1.4571) or Duratherm or Inconel, flange 316L (1.4404), PTFE-lined (accuracy class 2,5 [2,5 % F.S.], range >100 mbar, not for NPT threads)	(L) Liquid filled IP66 <sup>1)</sup>	(04) ½ NPT male		-400/ 0		(GR) Glycerin	(ATEX) ATEX approval
		(HS) Diaphragm Hastelloy C-276, flange 316L (1.4404) <sup>1)</sup>		(13) G ¼ B male		0/ 16		(GV) Silicone	(CS) Dual scale
				(14) G 3/8 B male		0/ 25		( ) Contact type and function (see data sheet G1.K55/E) <sup>1)</sup>	(DA) Dial marking
				(15) G ½ B male		0/ 40			(EA) External zero adjustment
				<b>Flange:</b>		0/ 60			(EP) Maximum pointer, adjustable
				(DN20) DN20		0/ 100	BAR		(MP) Micrometer pointer
				(DN25) DN25		0/ 160			(NH) Tagging wired
				(DN50) DN50		0/ 250			(PD) Acrylic glass
				(10-150) 1" 150#		0/ 400			(SH) Red set hand stationary
				(15-150) 1½" 150#		-1/ 0			
				(10-300) 1" 300#		-1/ 1,5			
				(20-150) 2" 150#		-1/ 3			
				(30-150) 3" 150#		-1/ 5			
				(R50) Open flange DN50		-1/ 9			
						-1/ 15			
						-1/ 24			
						0/ 0,6			
						0/ 1			
						0/ 1,6			
						0/ 2,5			
						0/ 4			
						0/ 6			
						0/ 10			
						0/ 16			
						0/ 25			
		1) not for vacuum and compound ranges	1) liquid filled only for ranges ≥ 100 mbar	others on request			psi and others on request	1) ranges ≤400 mbar only available with dial size 160 mm	Option listing starts with "X", followed by options separated by "=" Example: X=NH=SG=FW

### How to order

Size	Type	System material	Execution	Process connection	Connection orientation	Range	Engineering unit	Filling	Option
100	P5500	S	D	04	L	0/250	MBAR	=	NH

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