

NESS

STAINLESS STEEL LOW & HIGH PRESSURE GAUGE

DIAPHRAGM TYPE

Model - PD

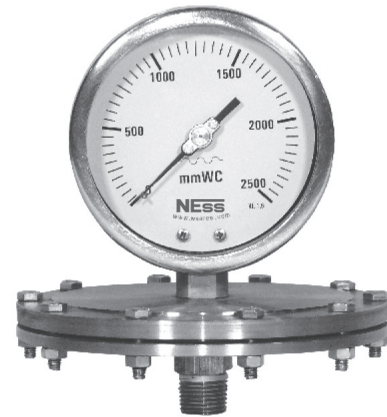
Schaffer Gauges work on the principle of sensing element the diaphragm. The displacement of the diaphragm is transferred via a link to the movement which rotates the pointer. These gauges are used to measure pressure of viscous fluids, gases & ideal for low pressure measurement in mbar / mmWC ranges.

Special Features :

- Stainless steel case & measuring system
- Flanged or Screwed Connection
- Standard followed in general EN 837-3

Applications :

- Schaffer Gauges are suitable for Pharmaceutical, Chemical,
- Petrochemical, Oil & Gas, Refinery, Paper & Pulp, Sugar, Breweries,
- Food & Beverages, Cement Industries, etc



Specifications

STANDARD VERSION : 100mm and 150mm

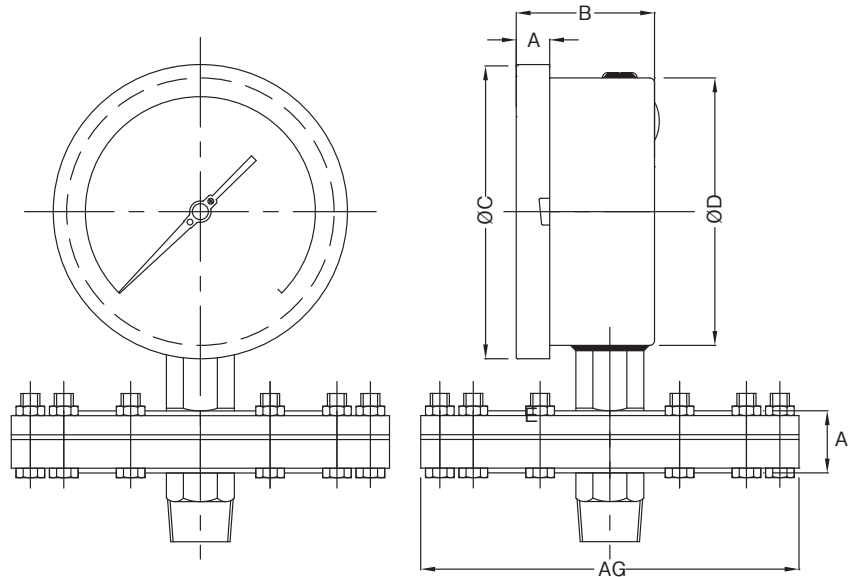
Diaphragm Type	: HP :- -1 to 0 bar & 0 to 21 bar
	: LP :- -6000 to 0 mmWC & 0 to 6000 mmWC
Accuracy	: $\pm 1.6\%$ of F.S.
Ambient temperature	: -25°C to $+65^{\circ}\text{C}$
Process temperature	: Max 100°C
Operating pressure	: 75% of the Scale Value
Over pressure limit	: 110% of Scale Value
Case & Bezel	: AISI 304 SS (Bayonet Type)
Top Chamber	: AISI 304 SS
Bottom Chamber	: AISI 316 SS
Movement	: AISI 304 SS
Diaphragm	: AISI 316L SS
Protection	: IP 65
Dial	: Aluminium, black graduation on white background
Pointer	: Aluminium, black coloured micrometer zero adjustable
Window	: Safety Glass

Temperature effect:

The variation of indication caused by effects of temperature is to be calculated by below formula;
 which is to be added in the specified accuracy while measurement :- Formula : $\pm 0.04 \times (t_2 - t_1) \% \text{ of F. S.}$
 where t_1 = reference temperature (+20° C) and t_2 = ambient temperature in ° C.

DIMENSIONS : - FOR STANDARD MODEL**TYPE 11**

DRAWING OF MODEL (TYPE WISE)

TYPE 11

Size	A	B	ØC	ØD	AG	AI	Type	Range Covered
100	12.5	47	111	100	150	17.5	LP	-400 to 0 & 0 to 400mmWC
150	15	49	161	149	150	17.5	LP	-400 to 0 & 0 to 400mmWC
100	12.5	47	111	100	158	17.5	LP	-6000 to 0 & 0 to 6000mmWC
150	15	49	161	149	158	17.5	LP	-6000 to 0 & 0 to 6000mmWC
100	12.5	47	111	100	98	19	HP	-1 to 0 & 0 to 25kg/cm ²
150	16	49	161	149	98	19	HP	-1 to 0 & 0 to 25kg/cm ²

SELECTION OF MODEL

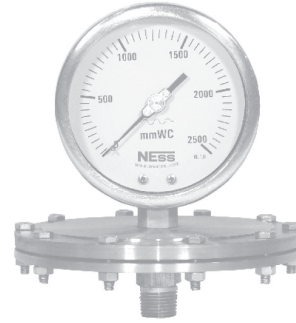
(1) MODEL CODE

(2) DIAL SIZE

Dial Size	Code
100	4
150	6

(3) MOUNTING TYPE

Mounting Type	Code
DIRECT BOTTOM ENTRY	11
2" PIPE / YOKE MOUNTING WITH BOTTOM ENTRY	41



(4) TOP CHAMBER

AISI 304 SS	S4	AISI 316 SS	S6
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(5) DIAPHRAGM

HASTELLOY 'C'	HT	AISI 316L SS	S6L
MONEL	MN		

(6) BOTTOM CHAMBER

AISI 304 SS	S4	HASTELLOY 'C'	HT
AISI 316 SS (Standard)	S6	MONEL	MN
AISI 316L SS	S6L	TITANIUM	TI

(7) PROCESS CONNECTION SIZE

1/2" BSP (M)	4BM	1/2" G (M)	4GM
1/2" BSPT (M)	4TM	3/8" G (M)	3GM
1/2" NPT (M)	4NM	1/2" R (M)	4RM
3/8" BSP (M)	3BM	3/8" R (M)	3RM
3/8" NPT (M)	3NM	FLANGED CONN.	**
3/8" BSPT (M)	3TM		

** MENTION FLANGE RATING

Ask factory for detail drawing in case of Flanged Connection (In CSI Model)

(8) RANGE

FOR L.P.

Pressure - bar	
0 - 0.6	0 - 6
0 - 1	0 - 10
0 - 1.6	0 - 16
0 - 2.5	0 - 21
0 - 4	

REFER TO THE FOLLOWING TABLE

Vacuum - bar	
-1 - 0	

Compound - bar	
-1 - 0.6	-1 - 9
-1 - 1.5	-1 - 15
-1 - 3	-1 - 20
-1 - 5	

(OTHER UNIT & DUAL SCALE CAN BE ARRANGED ON REQUEST.)

FOR L.P.

Pressure - mmWC	
0 - 250	0 - 2000
0 - 400	0 - 2500
0 - 600	0 - 4000
0 - 1000	0 - 6000
0 - 1600	

Vacuum - mmWC	
-250 - 0	-2000 - 0
-400 - 0	-2500 - 0
-600 - 0	-4000 - 0
-1000 - 0	-6000 - 0
-1600 - 0	

Compound - mmWC	
-100 - 150	-800 - 1200
-150 - 250	-1000 - 1500
-200 - 400	-1500 - 2500
-400 - 600	-2000 - 4000
-600 - 1000	

(OTHER UNIT & DUAL SCALE CAN BE ARRANGED ON REQUEST.)

(9) OPTIONS

BD	2" PIPE/YOKE MOUNTING BRACKET & 'U' CLAMP(AISI 304 SS)	BF	2" PIPE/YOKE MOUNTING BRACKET & 'U' CLAMP(AISI 316 SS)
CF	AISI 316 CASE & BEZEL	TS	SS TAG PLATE
TD	DIAL TAG MARKING	CC	FIVE POINT CALIBRATION CERTIFICATE
		MC	MATERIAL TEST CERTIFICATE

Example	1	2	3	4	5	6	7	8	9
Order Detail	PD	4	11	S6	S6L	S6	4NM	0-2.5 bar	Option XX

PD

4

11

S6

S6L

S6

4NM

0-2.5bar

or

0-2500mmwc

XX

Below options are provided on request of customer.

CC	FIVE POINT CALIBRATION CERTIFICATE
HT	HELIUM LEAK TEST
MC	MATERIAL TEST CERTIFICATE
WV	ON-OFF TYPE VENT PLUG
OS	OXYGEN SERVICE
DC	CUSTOM DESIGNED DIAL

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We reserve the rights to change models and specifications without prior notice.