

Differential pressure gauge Single diaphragm type



Features:

- All ss case
- All SS Measuring System
- Dry / Liquid filled

Applications:

- Suitable for clean air
- Fertilizers
- Power
- Cement
- Petrochemical
- Food & Beverage
- Pharmaceutical
- Sugar
- Pulp
- Paper
- Allied industries

Standard:

- EN 837-3

Standard Parameters

Accuracy	: ±2.5% of F. S. (for ascending order)
Ambient temperature	: -20 to +65°C
Process temperature	: Max 100°C
Static Pressure	: 10 kg/cm ² up to ranges 600 mmWC
	: 40 kg/cm ² for ranges 1000 mmWC to 2500 mmWC
	: 60 kg/cm ² for ranges 4000 mmWC & above
	: 75% of the scale value
Over Pressure Limit	: 130% of Max. Scale Value

Materials of Construction

Case & bezel	: AISI 304 SS (Bayonet type)
Diaphragm	: Spring Steel with PTFE protection (AISI 316L SS on request)
Nuts & bolts	: AISI 304 S
Process connection	: 1/4" NPT (F) x 2 Nos.
Seal chamber & movement	: AISI 304 SS
Protection	: IP 65
Dial	: Aluminium, black graduation on white background
Pointer	: Aluminium, black coloured, Micrometer Zero Adjustable
Window	: Shatter proof / Safety Glass
Case gasket	: Neoprene
Scale amplitude	: 180 to 270 (Depends on range)

Glycerine Filled Version

Accuracy	: ±4% of F.S. (For ascending order)
Ambient & Process Temperature	: Maximum 65°C
Window	: Plexi Glass
Dampening Liquids	: Glycerine 99.7%

Temperature Effect

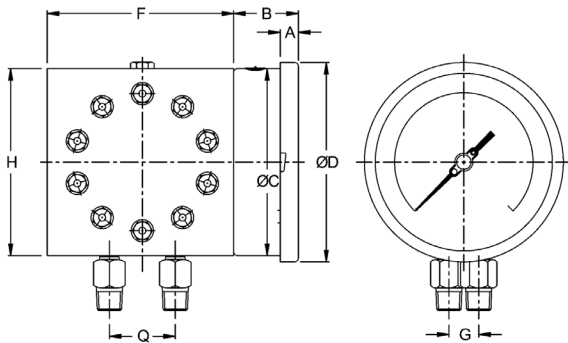
The variation of indication caused by effects of temperature is to be calculated by below formula which is to be added in the specific accuracy while measurement:

Formula $\pm 0.08 \times (t_2 - 1) \%$ of F.S.

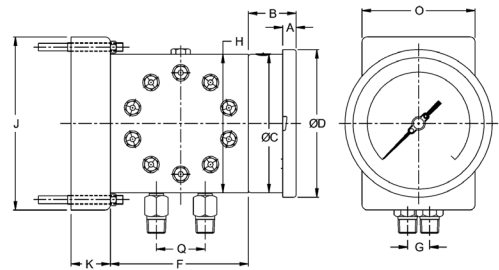
where t₁: reference temperature (+20°C) and t₂: ambient temperature in °C.

Dimensional drawing

TYPE 1



TYPE 7



Low pressure chamber

NS	A	B	ØC	ØD	F	H	G	Q	W
100	12.5	47	100	111	150	150	24	54	8100
150	15	49	149	161	150	150	24	54	8260

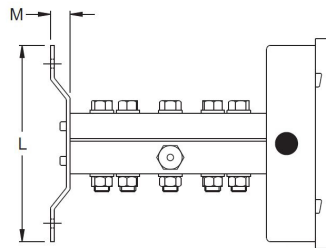
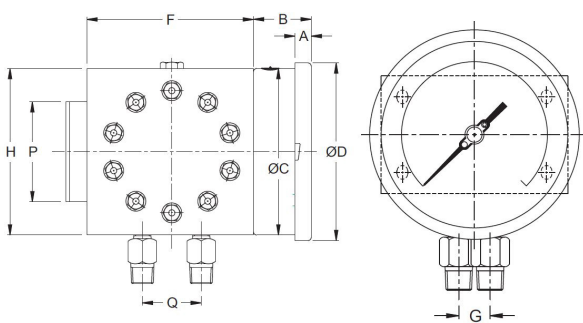
W = Weight in grams with box

Low pressure chamber

NS	A	B	ØC	ØD	F	H	G	Q	J	K	O	W
100	12.5	47	100	111	150	150	24	54	161	39	101	9000
150	15	49	149	161	150	150	24	54	161	39	101	9250

W = Weight in grams with box

TYPE 2

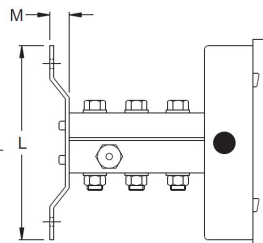
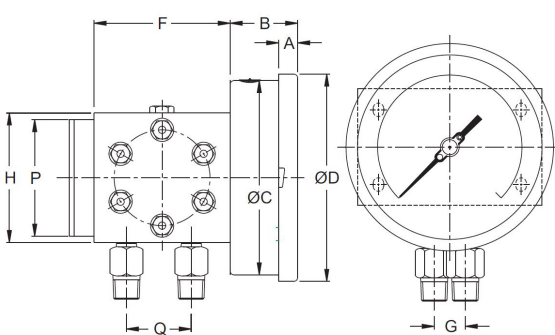


Low pressure chamber

NS	A	B	ØC	ØD	F	H	G	Q	P	M	L	W
100	12.5	47	100	111	150	150	24	54	90	15	150	8410
150	15	49	149	161	150	150	24	54	90	15	150	8560

W = Weight in grams with box

TYPE 2



High pressure chamber

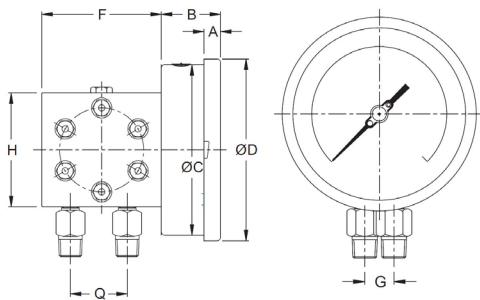
NS	A	B	ØC	ØD	F	H	G	Q	P	M	L	W
100	12.5	47	100	111	150	150	25	54	90	15	150	4610
150	15	49	149	161	150	150	25	54	90	15	150	4760

W = Weight in grams with box

Note: ● Drawings are not to scale ● All dimensions are in mm

Dimensional drawing

TYPE 1

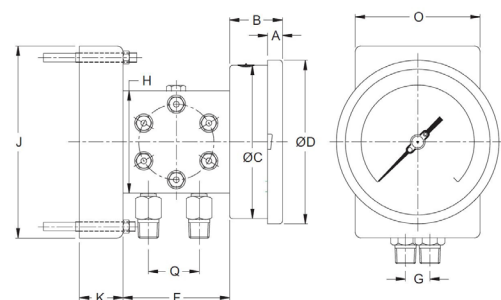


High pressure chamber

NS	A	B	ØC	ØD	F	H	G	Q	W
100	12.5	47	100	111	105	100	25	54	4250
150	15	49	149	161	105	100	25	54	4400

W = Weight in grams with box

TYPE 7

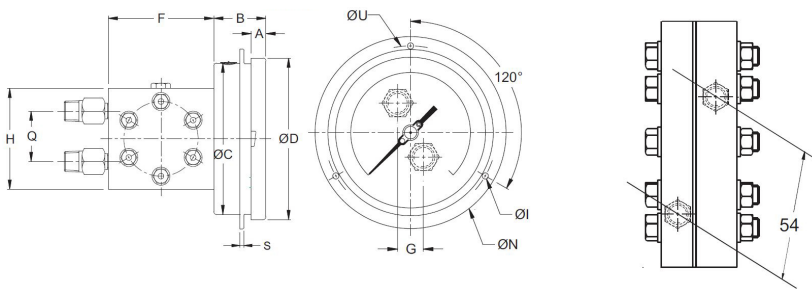


High pressure chamber

NS	A	B	ØC	ØD	F	H	G	Q	J	K	O	W
100	12.5	47	100	111	150	150	24	54	161	39	101	5000
150	15	49	149	161	150	150	24	54	161	39	101	5250

W = Weight in grams with box

TYPE 5



High pressure chamber

NS	A	B	ØC	ØD	F	H	G	Q	W
100	12.5	47	100	111	105	100	25	54	4250
150	15	49	149	161	105	100	25	54	4400

W = Weight in grams with box

Range table

Note: We offer Pressure, Vacuum and Compound ranges in Scales like kPa, MPa, bar, psi, kg/cm² & dual Scale like kPa with psi, kPa with bar, bar with psi or scales as per the requirement can be provided on request. Following are the example tables for kg/cm² & psi scales

Pressure range (Single scale)

Low Pressure			High Pressure		
mmWC	mmWC	mmWC	Kg/cm ²	Kg/cm ²	Kg/cm ²
0/250	0/1000	0/4000	0/1	0/2.5	0/10
0/400	0/1600	0/6000	0/1.6	0/4	
0/600	0/2500		0/2	0/6	

Accessories

Manifolds

Note: ● Drawings are not to scale ● All dimensions are in mm

Range table

Wiring diagrams for electric contacts

Single Contact			
<p>1 NO</p>	<p>Opening</p>	<p>1 NC</p>	<p>Closing</p>
Double contact			
<p>1 NO + 1 NC</p>	<p>Opening 1 Closing 2</p>	<p>1 NC + 1 NC</p>	<p>Closing 1 Closing 2</p>
<p>1 NC + 1 NO</p>	<p>Closing 2 Opening 1</p>	<p>1 NO + 1 NO</p>	<p>Opening 1 Opening 2</p>
Independent double contact			
<p>1 NO + 1 NC</p>	<p>Opening 1 Closing 2</p>	<p>1 NC + 1 NC</p>	<p>Closing 1 Closing 2</p>

Ordering codes

1. Dial Size		E	6. Options		5C
Code	Nominal size		S6	AISI 316 SS case & bezel	
E	100 mm	1	5C	Five-point calibration certificate	
G	150 mm		LG	Dampening liquid glycerine filled	
2. Mounting			LS	Dampening liquid Silicon Oil	
1	Direct bottom		MT	Material test certificate**	
2	Bottom surface		MP	Maximum reading pointer with plexi glass# (except option OA and only for dry version)	
7	2" pipe / yoke mounting		TG	Toughened glass	
10	Flush back panel with front flange◆		PG	Plexi glass	
◆ suitable for high pressure chamber only			CD	Custom designed dial	
3. Gauge Connection*			ST	SS tag plate	
6N15B	1/4" NPT[M] x 1/2" BSP[M] x 2Nos		NT	Calibration certificate with NABL traceability	
6N15N	1/4" NPT[M] x 1/2" NPT[M] x 2Nos	DT	Dial tag marking		
06NF	1/4" NPT[F]	7. Electric Contact type			
*Through adapters		SM	Single: make contact (1NO)		
4. Diaphragm		SB	Single: break contact (1NC)		
CV	Spring Steel with PTFE protection (Standard)	DMB	Double: 1 make + 1 break (1NO+1NC)		
MO	MONEL	D2B	Double: 2 x break contact (2NC)		
S6L	AISI 316L SS	DBM	1 Break + 1 make (1NC+1NO)		
5. Chamber		D2M	Double: 2 x make contact (2NO)		
S4	AISI 304 SS (Standard)	IMB	Independent: 1 make + 1 break (1NO+1NC)		
S6	AISI 316 SS	I2B	Independent: 2 x break contact (2NC)		
MO	MONEL	8. Range			
		Refer range table			
		0-10 Kg/cm²			

Ordering Example: DSD-E-1-6N15B-CV-S4-5C-0-10Kg/cm²

**Material test certificate will be provided for wetted parts only. For others, pls contact factory.

Note: Specifications and dimensions given in this product catalogue represents the state of engineering at the time of printing. Modifications may take place and materials specified may be replaced by others without prior notice.