

Differential pressure gauge Piston operated



Features:

- Simple and compact design.
- Over pressure safe from either side to maximum working pressure.
- Indicating mechanism isolated from pressure chamber.
- Suitable for Air / Gas media.

Applications:

- Filters
- Hydraulic systems
- Water treatment plants
- Chemical plants
- Natural gas processing
- Heat exchanger
- Gasoline / diesel engine filters
- Pumps
- Valves
- Compressors

Standard Parameters

Accuracy	: ±2% F.S. (For ascending order)
Ambient temperature	: Max 65° C
Process temperature	: Max. 80° C
Static Pressure (on request)	: 50 bar to 700 bar
Over pressure range	: up to the full-scale value
Connection	: 1/4" NPT[F] x 2 Nos.
Working Pressure	: 0.25 to 50 Bar

Materials of Construction

Case	: AISI 304 SS
Wetted parts	: Teflon, Ceramic magnet & SS spring
Body	: AISI 316 SS
Protection	: IP 65
Dial	: Aluminium, black graduation on white background
Pointer	: Aluminium, black coloured, Fixed
Window	: Plain glass

Glycerine Filled Version

Accuracy	: ±2.5% F.S. (For ascending order)
Ambient temperature	: Max 65° C
Process temperature	: Max. 65° C
Window	: Plexi glass
Dampening liquids	: Glycerine 99.7%

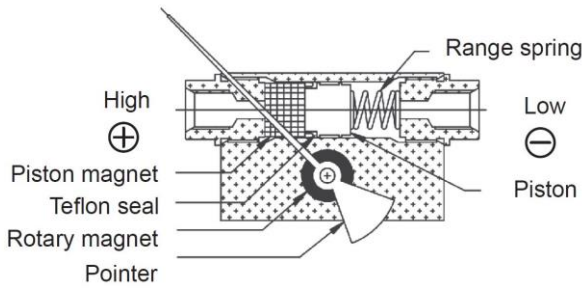
Temperature Effect

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 $\pm 0.04 \times (t_2 - t_1) \% \text{ of F.S.}$

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

Operating Principle

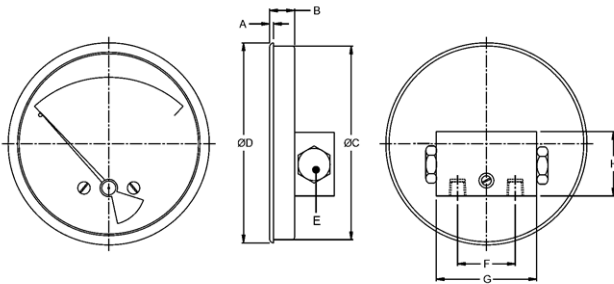


High and Low pressures are separated by a sensor assembly consisting of a magnet, piston, Teflon seal and a range spring. The difference in pressure causes the sensor assembly to move in proportion to the change against a range spring.

A rotary magnet, located in a separate body cavity and isolated from the acting pressures, is rotated by magnetic coupling as per the linear movement of the sensor assembly. A pointer attached to the rotary magnet indicates differential pressure on the dial.

Dimensional Drawing

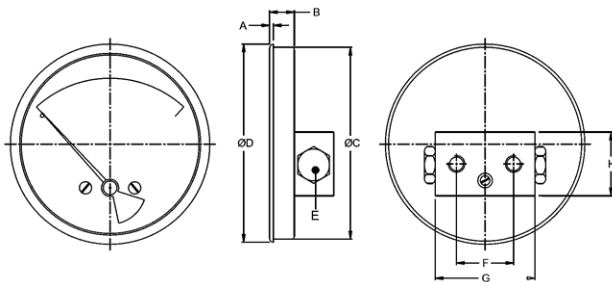
TYPE 1



NS	A	B	ØC	ØD	E	F	G	H	W*
63	3.2	19.5	62.5	66.5	25	46	78	50	430
100	3.2	19.5	101.5	104	20	46	76	50	460
150	3.2	19.5	151.5	155.5	20	46	76	50	560

*Weight in grams

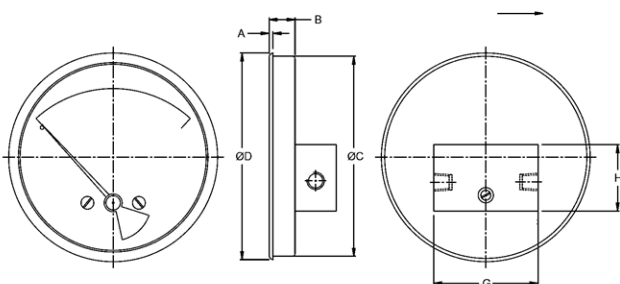
TYPE 4



NS	A	B	ØC	ØD	E	F	G	H	W*
63	3.2	19.5	62.5	66.5	20	46	76	50	400
100	3.2	19.5	101.5	104	20	46	76	50	450
150	3.2	19.5	151.5	155.5	20	46	76	50	540

*Weight in grams

TYPE 13



NS	A	B	ØC	ØD	G	H	W*
63	3.2	19.5	62.5	66.5	76	50	410
100	3.2	19.5	101.5	104	76	50	460
150	3.2	19.5	151.5	155.5	76	50	550

*Weight in grams

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

Range table

Note: We offer Pressure, Vacuum and Compound ranges in Scales like kPa, MPa, bar, psi, mmWC, inWC & 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 & kPa scales

Single Scale (kg/cm ²)					
kPa	kPa	kPa	kg/cm ²	kg/cm ²	kg/cm ²
0/25	0/200	0/500	0/0.25	0/2	0/5
0/50	0/250	0/600	0/0.5	0/2.5	0/6
0/75	0/300	0/700	0/0.75	0/3	0/7
0/100	0/350	0/900	0/1.	0/3.5	0/9
0/160	0/400	0/1000	0/1.6	0/4	0/10

Ordering codes

1. Dial Size Code Nominal size C 63mm E 100mm G 150mm	E	5. Gauge Connection 06NF 1/4" NPT[F] x 2Nos (Standard) 06BF 1/4" BSP[F] x 2Nos <small>Note: Connections like Metric/PT/PF/Flaired/UNF/G/R etc. can be provided on request.</small>	06NF
2. Case Type NF Without front flange F With front flange		F	
3. Mounting 1 Direct bottom 4 Direct back 13 In line entry	1	7. Options CD Custom designed dial DT Dial tag marking ST SS tag plate 5C Calibration certificate LG Dampening liquid glycerine filled Y4 2" pipe/yolk mounting bracket & U clamp (AISI 304 SS)	5C
4. Body material AL Aluminum Br Brass S6 AISI 316 SS		AL	

Ordering Example: DP-E-F-1-AL-06NF-0/2kg/cm²-5C

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.