

DIFFERENTIAL PRESSURE GAUGE MAGNETIC PISTON TYPE

DPMG

Applications :

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

Special Features :

- ★ Simple and compact design.
- ★ High operating pressure up to 200 bar.
- ★ Over pressure safe from either side to maximum working pressure.
- ★ Indicating mechanism isolated from pressure chamber.
- ★ Suitable for Air / Gas media.



Specifications

Standard Version : NS 63 , 100 & 150

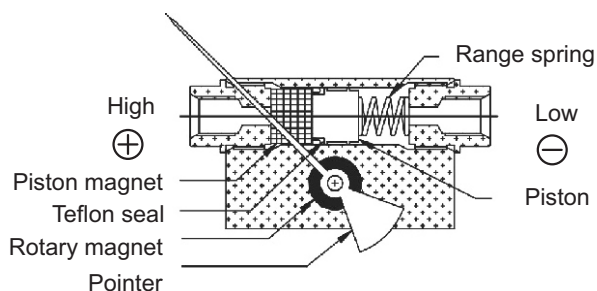
Accuracy	± 2% of F. S. (For ascending order)
Ambient temperature	Max. 65°C
Process temperature	Max. 80°C
Static pressure (on request)	10 kg/cm ² up to ranges 1 bar 16 kg/cm ² for ranges above 1.6 bar
Over pressure range	Up to the Full Scale Value
Connection	1/4" NPT (F) x 2 Nos.
Case	AISI 304 SS
Wetted parts	Teflon, Ceramic Magnet & SS Spring
Body	AISI 316 SS
Protection	IP 65
Dial	Aluminum, black Colored, Fixed
Window	Plain Glass

Glycerine filled version (option py)

Accuracy	±4.0% of F. S. (For ascending order)
Ambient temperature	Maximum 65°C
Process temperature	Maximum 65°C
Window	Plexi Glass
Dampening liquids	Glycerin 99.7% (others available as option)
Other features	Refer Specification of Standard Version

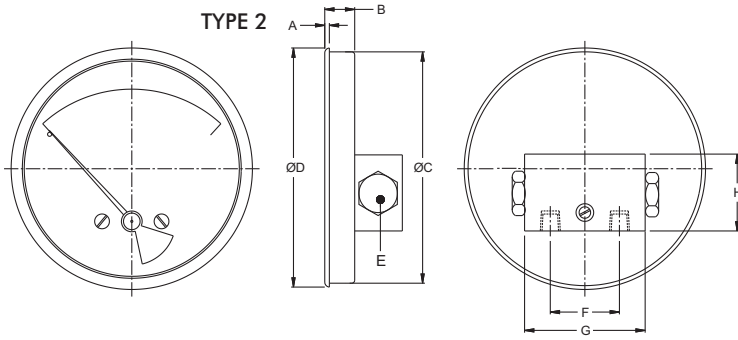
Temperature effect :

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 : ± 0.04 x (t₂ - t₁) % of F. S. where t₁ = reference temperature (+20°C) and t₂ = ambient temperature in °C.

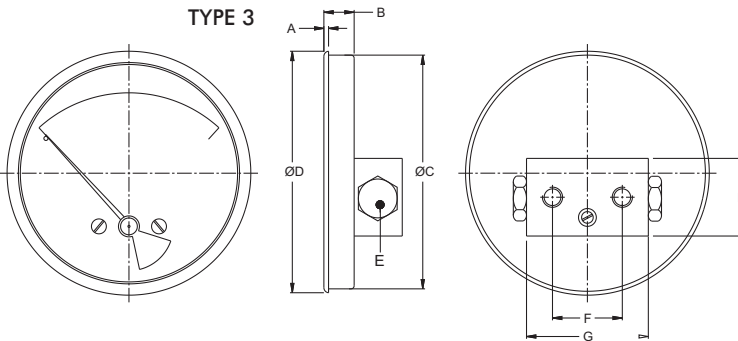


High and Low pressures are separated by a sensor assembly consisting of a magnet, piston, Teflon seal and a range spring. The difference in pressure causes the sensor assembly to move in proportion to the change against a range spring. A rotary magnet, located in a separate body cavity and isolated from 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.

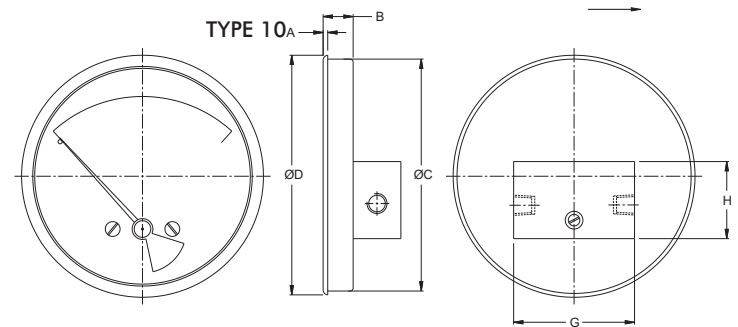
Dimensions - standard version



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



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



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

Range Table

All Dimensions are in mm, Drawings are not to scale

Note : Delta offers National / International Scales like kPa, bar, psi, kg/cm², mbar, mmWC, in WC or Equivalent scales as per the requirement can be provided on request. Following are the example tables for kPa & kg/cm²

Gauge Pressure Range

Single scale					
kPa	kPa	kPa	kg/cm ²	kg/cm ²	kg/cm ²
0 / 25	0 / 200	0 / 500	0 / 0.25	0 / 2.00	0 / 5.00
0 / 50	0 / 250	0 / 600	0 / 0.50	0 / 2.50	0 / 6.00
0 / 75	0 / 300	0 / 700	0 / 0.75	0 / 3.00	0 / 7.00
0 / 100	0 / 350	0 / 900	0 / 1.00	0 / 3.50	0 / 9.00
0 / 160	0 / 400	0 / 1000	0 / 1.60	0 / 4.00	0 / 10.00

Note : Other Scale are available on customer request.

How To Order

Basic Model					DPMG
Code					
Nominal Size		B	C	D	C
		63 mm	100 mm	150 mm	
Case Type					
HN Case without front flange	HO Case with front flange				CN
Mounting					3
2 Direct bottom entry	3 Direct back entry	10 In line entry			
Body Material					CL
HU Aluminium	CL AISI 316 SS	CN Monel			6NF
Gauge Connection					
6NF 1/4" NPT (F) X 2 Nos. (Standard)	6BF 1/4" BSP (F) X 2 Nos.				0/2 kg/cm ²
Mounting					0/2 kg/cm ²
Note : Connections like Metric/ PT/ PF/ Flaired/ UNF/ G/ R etc. can be provided on request.					
Range					0/2 kg/cm ²
Refer range table					
Options					RH
RH Custom designed dial					LG
SW Dial tag marking					
SX SS tag plate					
NG Calibration certificate					
GF Dampening liquid glycerine filled					
JU 2" pipe/yoke mounting bracket & 'U' clamp (AISI 304 SS)					

Ordering Example: DPMG . C . CN . 3 . CL . 6NF . 0/2 kg/cm² . RH . LG

For other optional items, please contact factory for delivery and minimum quantity of order.

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.