

# 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

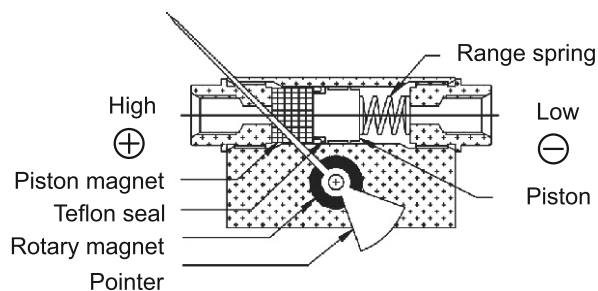
Accuracy	± 2% of F. S. (For ascending order)
Ambient temperature	Max. 65°C
Process temperature	Max. 80°C
Static pressure (on request)	10 kg/cm <sup>2</sup> up to ranges 1 bar 16 kg/cm <sup>2</sup> for ranges above 1.6 bar
Over pressure range	Up to the Full Scale Value
Connection	1/4" NPT (F) x 2 Nos.
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

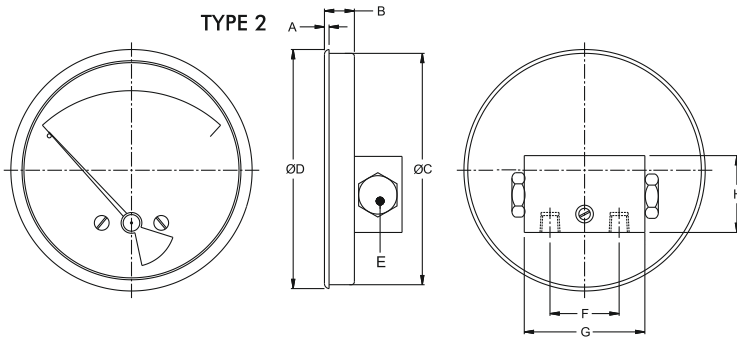
### Temperature effect :

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.

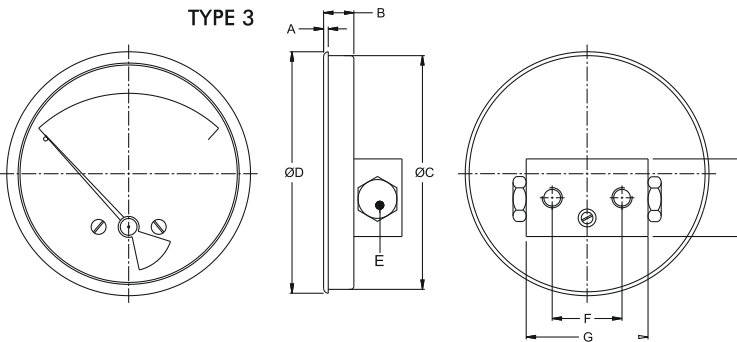


High and Low pressures are separated by a sensor assembly consisting of a magnet, piston, Teflon seal and a range spring. The difference in pressure causes the sensor assembly to move in proportion to the change against a range spring. A rotary magnet, located in a separate body cavity and isolated from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

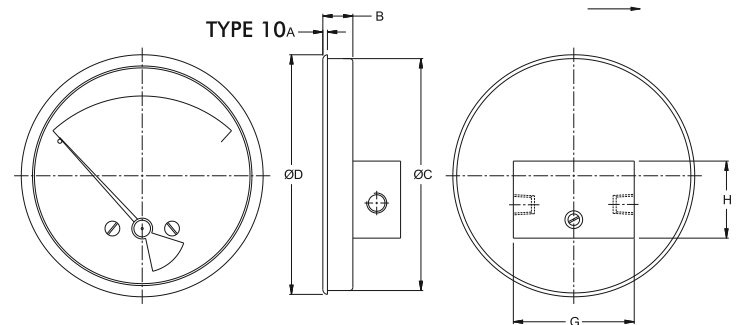
## Dimensions - standard version



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
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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/cm<sup>2</sup>, mbar, mmWC, in WC or Equivalent scales as per the requirement can be provided on request. Following are the example tables for kPa & kg/cm<sup>2</sup>

### Gauge Pressure Range

Single scale					
kPa	kPa	kPa	kg/cm <sup>2</sup>	kg/cm <sup>2</sup>	kg/cm <sup>2</sup>
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

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

## Ordering Example: DPMG . C . CN . 3 . CL . 6NF . 0/2 kg/cm<sup>2</sup> . 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.