# **Mag-DP - Differential Pressure Gauges**



## for low Differential Pressure measurement MODEL: DPMG

"General" make Mag-DP Gauges are designed for measuring very low differential pressures. Minimum measuring Range offered is as low as 0 to 6 mmWC(DP). The Mag-DP Gauges are suitable for measuring fan & blower pressures, filter resistance, furnace draft, and pressure drop across orifice plates, etc. Mag-DP Gauges are designed to suit Flush Panel Mounting or Surface (Projection) Mounting or Yoke (2" Pipe) Mounting as per requirement. For maximum accuracy, it is recommended to mount the Gauge in Vertical position. Suitable mounting accessories are provided with each Gauge.

## **Features**

- Diaphragm operated, with magnetic helical Movement
- Suitable for measuring very low differential pressure
- Minimum measuring Range as low as 0 to 6 mmWC(DP)
- Silicone Rubber diaphragm (Buna-N for Hydrogen Service)
- Body material Aluminium



## **Working Principle**

The Mag-DP Gauge consists of a Silicone Diaphragm with integrally moulded O-Ring. The Diaphragm is locked and sealed in its position with a sealing plate & retaining ring. There is a Range Spring to which Diaphragm is connected. Depending upon the applied pressure, the displacement of the Diaphragm is transferred to the Range spring. This causes the motion of the magnet provided at one end of the Range spring. The change in magnetic field rotates the Helical movement which also is made with magnetic material and mounted on frictionless jewelled beading. The pointer is fixed on the helical movement. Thus the rotation of the helical movement is directly indicated by the Pointer above the Dial.

#### **Specifications**

Mounting Orientation	Diaphragm in vertical position (Consult factory for other position orientations).
Size	Nominal Size 4" (100 mm) & Case OD 4-1/2" (114 mm)
Dial	Aluminium, white background with Black markings
Housing	Die cast Aluminum Case & Bezel, with Acrylic cover, Weather proof to IP-65 as per IEC-60529.
	Exterior finish in coated Gray, withstands 168 hour Salt spray Corrosion Test.
Sensing Element	Silicone Rubber diaphragm with integrally molded O-ring
·	For Hydrogen Service Diaphragm shall be Buna-N.
Process Connections	1/8" NPT(F) duplicate HP & LP Connections - One Pair at side & the other at back/rear.
	(1/8"NPT Plugs shall be provided for the unused connections)
Accuracy	$\pm 2\%$ of FSD for Range 0 to 25 mmWC & above at 24 DegC
	$\pm 3\%$ of FSD for Range 0 to 10mmWC to 15 mmWC at 24 DegC
	$\pm4\%$ of FSD for Range 0 to 6, -3 to 3, -5 to 5 mmWC at 24 DegC
Pressure Limits	(-)500 mm Hg Vacuum to 1 bar.g Pressure
Over pressure	Relief plug opens at approximately 25 psig (1.72 bar)
Temperature Limits	20 to 140°F (-6.67 to 60°C).
Weight	Approx 500 gm
Standard Accessories	Two 1/8" NPT Male plugs for duplicate process connections
	Two 1/8 " pipe thread to rubber tubing adaptors
	Three flush mounting adapters & suitable screws.

## **Ordering Information**

