



DP2

Differential Pressure Gauge Piston With Diaphragm Operated

Special Features

- Simple and compact design.
- High operating pressure up to 400 bar. (700 bar On Request)
- Over pressure safe from either side to maximum working pressure.
- Indicating mechanism isolated from pressure chamber.
- Suitable for Air / Gas media.

Application

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



Specifications

Standard Version: 63 mm, 100 mm & 150 mm

Accuracy : $\pm 2.5\%$ of F.S. (For asscending order)

Ambient temperature : Max. 65°C Process temperature : Max. 80°C

Scale Range : 0 to 0.25 bar upto 4 bar

Static Pressure 35 bar

Over pressure range : same as Static Pressure 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)

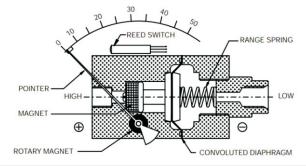
Ambient temperature : Maximum 65°C Process temperature : Maximum 65°C Window : Plexi Glass

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: $\pm 0.04 \times (t2 - t1) \%$ 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.

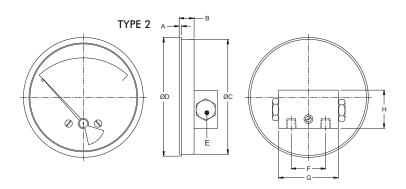
A rotary magnet, located in a separate body cavity and isolated from the acting pressures, is rotated by magnetic coupling as per the linear movement of the sensor assembly. A pointer attached to the rotary magnet indicates differential pressure on the dial.



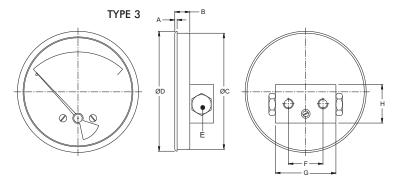
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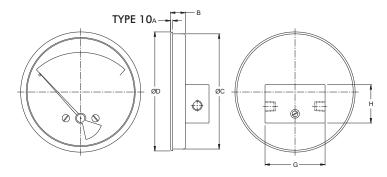
Dimensions - standard version



NS	Α	В	øс	ØD	E	F	G	Н	Weight in gram (With Box)
63	12	17.0	62.5	70.0	25	54	77.5	50	430
100	12	22.0	100	111	25	54	77.5	50	460
150	15	22.0	148.5	161	25	54	77.5	50	560



NS	Α	В	øс	ØD	E	F	G	Н	Weight in gram (With Box)
63	12	17.0	62.5	70.0	25	54	77.5	50	400
100	12	22.0	100.0	111	25	54	77.5	50	450
150	15	22.0	148.5	161	25	54	77.5	50	540



NS	Α	В	øс	ØD	Е	G	Н	Weight in gram (With Box)
63	12	17.0	62.5	70.0	25	77.5	50	400
100	12	22.0	100.0	111	25	77.5	50	450
150	15	22.0	148.5	161	25	77.5	50	540

Notes: • Drawings are not to scale. • All Dimensions are in mm. • NS = Nominal Size.

Range Table

Note: We offer National / International Scales like kPa, bar, psi, kg/cm², mbar, mmWC, inWC 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		
kg/cm²	kg/cm²	
0 / 0.25	0 / 2.00	
0 / 0.50	0 / 2.50	
0 / 0.75	0 / 3.00	
0 / 1.00	0 / 3.50	
0 / 1.60	0 / 4.00	

Note: Other Scale are available on customer request.



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How To	Order Order	Example
Basic M	odel	DP2
Code		
Nominal	Size 25 40 60	
	63 mm 100 mm 150 mm	XX
Case Ty	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
	Case without front flange PM Case with front flange	XX
Nountin	α	
	Direct bottom entry 3 Direct back entry 10 In line entry	X OR
	·	XX
Body M	aterial	
AL	Aluminium S6 AISI 316 SS MO Monel	XX
Gauge C	Connection	\0.07
2NF	1/4" NPT (F) X 2 Nos. (Standard) 2BF 1/4" BSP (F) X 2 Nos.	XXX
if Rec	uired Other Process Connection Possible Through Adaptor	
Range		0/2
Refer rar	nge table	kg/cm ²
Options	·	
CDD	Custom designed dial	
TND	Tag No Marking on Dial	
STP	SS tag plate	XXX
CLC	Calibration certificate	
DLG	Dampening liquid glycerine filled	
PY4	2" pipe/yoke mounting bracket (AISI 304 SS)	
MRP	Maximum Reading Pointer With Plexi Glass	

Ordering Example: DP2 - XX - XX - X OR XX - XX - XXX - 0/2 kg/cm² - XXX

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.