

DP1 Differential Pressure Gauge Piston 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

CE

CE

Specifications

Standard Version : 63 mm, 100 mm & 150 mm ± 2.5% of F.S. (For ascending order) Accuracy Ambient temperature Max. 65°C Process temperature Max. 80°C Static pressure (on request) 400 kg/cm² for ranges 1 bar & Above same as Static Pressure Over pressure range 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 Aluminum, black Colored, Fixed Dial Window Plain Glass Glycerine filled version (option py) ±4.0% of F. S. (For ascending order) Accuracy Ambient temperature Maximum 65°C Process temperature Maximum 65°C Window Plexi Glass

Temperature effect :

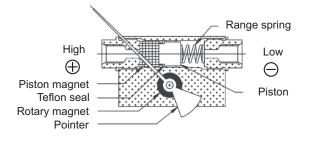
Dampening liquids

Other features

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 ($\pm 20^{\circ}$ C) and t2 = ambient temperature in °C.

Glycerin 99.7% (others available as option) Refer Specification of Standard Version

Operating Principle



High and Low pressures are separated by **s**ensor 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.

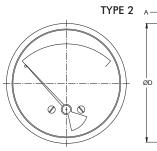
A rotary magnet, located in a separate body cavity and isolated from the acting pressures, is rotated by magnetic coupling as per the linear movement of the sensor assembly. A pointer attached to the rotary magnet indicates differential pressure on the dial.

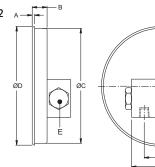


DP1

Differential Pressure Gauge Piston Operated

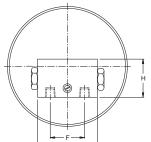
Dimensions - standard version



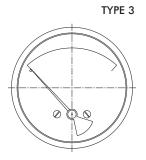


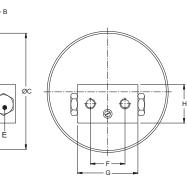
A –

ØD

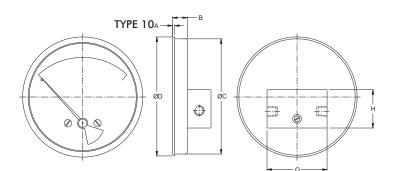


NS	A	в	ØC	ØD	Е	F	G	Н	Weight in gram (With Box)
63	12	17.0	62.5	70.0	25	54	77.5	50	430
100	12	22.0	100	111	25	54	77.5	50	460
150	15	22.0	148.5	161	25	54	77.5	50	560





NS	A	В	ØC	ØD	Е	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	A	в	øc	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

Single scale					
kPa	kPa	kPa	kg/cm²	kg/cm²	kg/cm²
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
0 / 200	0 / 500		0 / 2.00	0 / 5.00	
0 / 250	0 / 600		0 / 2.50	0 / 6.00	
0 / 300	0 / 700		0 / 3.00	0 / 7.00	

Note : Other Scale are available on customer request.



DP1

Differential Pressure Gauge Piston Operated

How T	o Order								Exampl	le
Basic I	Iodel								DP1	
Code										
Nomina	al Size					25	40	60		
					(63 mm	100 mm	150 mm	XX	
Case T	уре			I						
DM	Case without front flange	PM	Case with from	t flange					XX	
Mounti	ng									
2	Direct bottom entry	3	Direct back en	try	10	In line er	ntry		X OR	
Body I	Material								XX	
AL	Aluminium	S 6	AISI 316 SS		мо	Monel			XX	
Gauge	Connection									
2NF	1/4" NPT (F) X 2 Nos. (Star	idard)	2BF	1⁄4" BSP (F) X	X 2 N	OS.			XXX	
if Re	quired Other Process Conn	ection	Possible Throug	h Adaptor						
Range									0/2	
Refer ra	ange table								kg/cm ²	2
Option	S									
CDE	Custom designed dial									
TND	-									
STP	SS tag plate								XXX	
CLC	Calibration certificate									
DLG	Dampening liquid glyceri	ne fille	Ł							
PY4	2" pipe/yoke mounting br	acket (AISI 304 SS)							
MRF	 Maximum Reading Point 	er With	Plexi Glass							
MRF	Maximum Reading Point	er With	Plexi Glass							

Ordering Example: DP1 - 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.