

Single Diaphragm Type Differential Pressure Gauge



CE

Special Features

- CE approved electrical contacts
- Case & measuring system in SS
- Dry or liquid filled
- Standard followed in general EN 837 - 3

Application

- Suitable for clean air
- Compatible gases
- Fertilizer
- Petrochemicals
- Pharmaceutical
- Power
- Cement
- Sugar
- Food & beverages
- Pulp
- Paper
- Allied process industries

Specifications

Standard Version : 100 mm & 150 mm

Accuracy	:	±2.5% of F.S. (For ascending order) Or ± 1.6% of F.S. Available on Request With Extra Charge
Ambient temperature	:	- 25°C to + 65°C
Process temperature	:	Max. 100°C
Static pressure	:	2.5 kg/cm ² up to ranges 600 mmWC
	:	10 kg/cm ² for ranges 1000 mmWC to 6000 mmWC
	:	40 kg/cm ² for ranges 1 Kg/cm ² & above

Case & bezel	:	AISI 304 SS (Bayonet Type)
Diaphragm	:	Spring Steel with PTFE protection (AISI 316L SS on request)
Nuts & bolts	:	AISI 304 SS
Process connection	:	1/4" NPT (F) x 2 Nos.
Seal chamber	:	AISI 304 SS
Movement	:	AISI 304 SS

Protection	:	IP 68
Dial	:	Aluminum, black graduation on white background
Pointer	:	Aluminum, black coloured, Micrometer Zero Adjustable
Window	:	Shatter proof / Safety Glass
Case Gasket	:	Neoprene
Scale Amplitude	:	180 to 270 (Depends on Range)

Glycerine filled version (option DLG)

Accuracy	:	±4% of F. S. (For ascending order)
Ambient Temperature	:	Maximum 65°C
Process Temperature	:	Maximum 65°C
Window	:	Plexi Glass
Dampening Liquids	:	Glycerin 99.7%
Other Features	:	Refer Specification of Standard Version

Electrical contacts - dry version

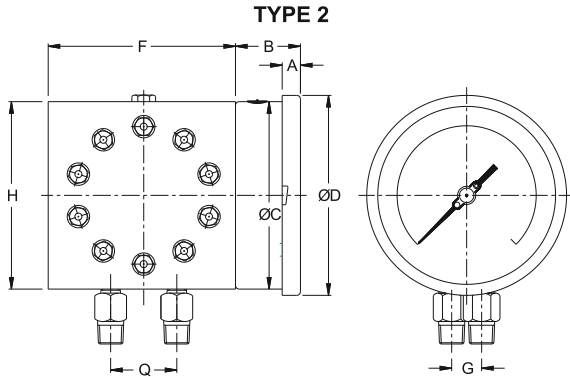
Accuracy	:	±3% of F. S. (For ascending order)
Ambient Temperature	:	Maximum 65°C
Process Temperature	:	Maximum 65°C
Window	:	Polycarbonate Dome
Dampening Liquids	:	Dielectric Oil (Optional)
Electrical Contacts*	:	Refer How to Order
Other Features	:	Refer Specification of Standard Version

* Please specify contact set points while ordering.

Temperature effect:

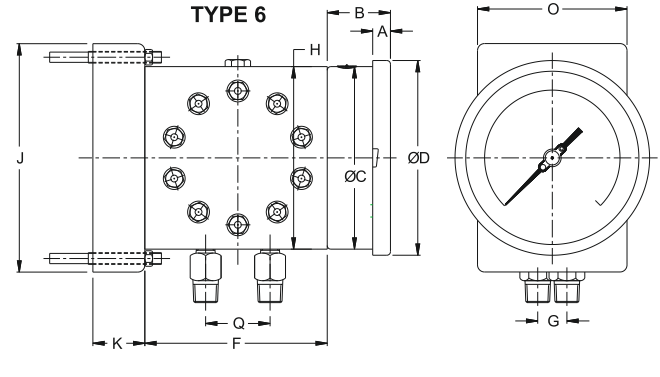
The variation of indication caused by effects of temperature is to be calculated by below formula; which is to be added in the specified accuracy while measurement :- Formula : $\pm 0.08 \times (t_2 - t_1) \% \text{ of F. S.}$ where t_1 = reference temperature (+20°C) and t_2 = ambient temperature in °C.
Note : The addition of mechanical electric contacts affects the accuracy of instruments such that 1% becomes 1.5%, 1.6% becomes 2.4% etc.
(Add the 50% of accuracy; If the contact is of the magnetically assisted type, this value can't be added within the ±5% of setting point.)

Dimensions - standard version



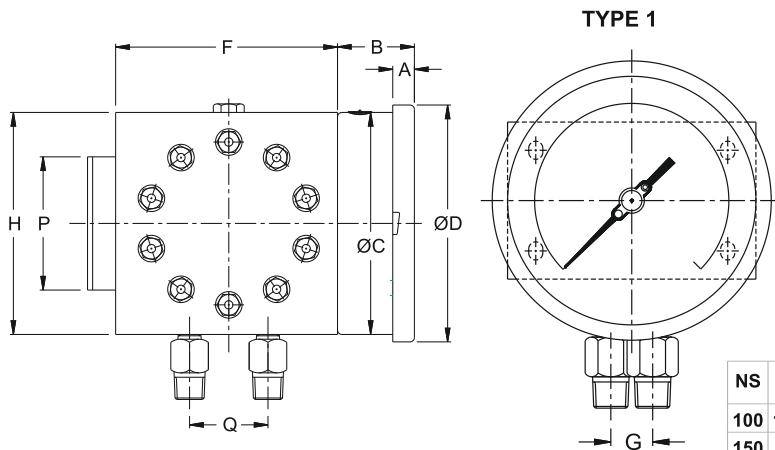
LOW PRESSURE CHAMBER

NS	A	B	ØC	ØD	F	H	G	Q	Weight in gram (With Box)
100	12.5	47	100	111	150	150	24	54	8100.0
150	15	49	149	161	150	150	24	54	8260.0



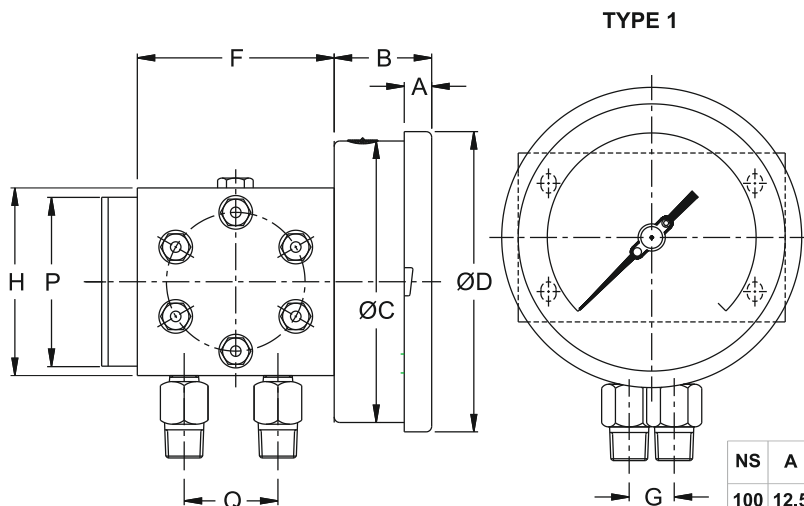
LOW PRESSURE CHAMBER

NS	A	B	ØC	ØD	F	H	G	Q	J	K	L	Weight in gram (With Box)
100	12.5	47	100	111	150	150	24	54	161	39	101	9000.0
150	15	49	149	161	150	150	24	54	161	39	101	9250.0



LOW PRESSURE CHAMBER

NS	A	B	ØC	ØD	F	H	G	Q	P	M	L	Weight in gram (With Box)
100	12.5	47	100	111	150	150	24	54	90	15	150	8410.0
150	15	49	149	161	150	150	24	54	90	15	150	8560.0

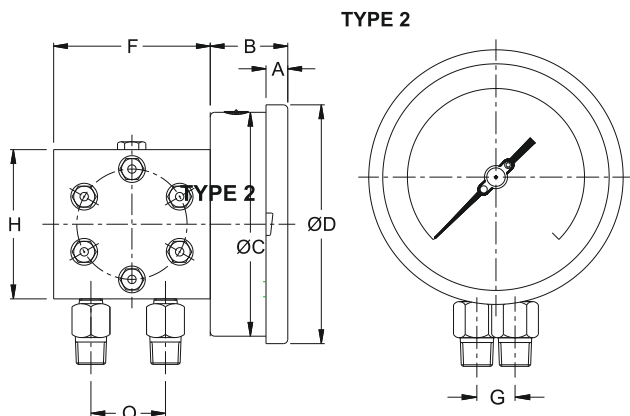


HIGH PRESSURE CHAMBER

NS	A	B	ØC	ØD	F	H	G	Q	P	M	L	Weight in gram (With Box)
100	12.5	47	100	111	150	150	25	54	90	15	150	4610.0
150	15	49	149	161	150	150	25	54	90	15	150	4760.0

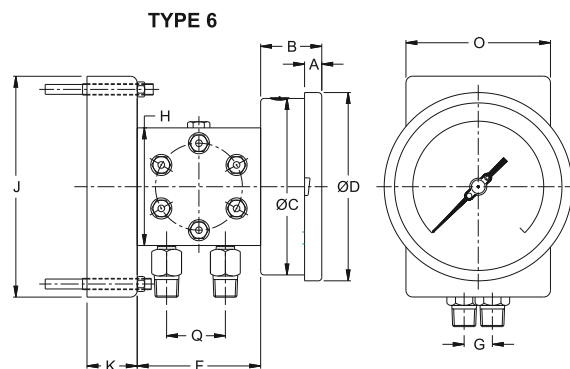
Single Diaphragm Type Differential Pressure Gauge

Dimensions - standard version



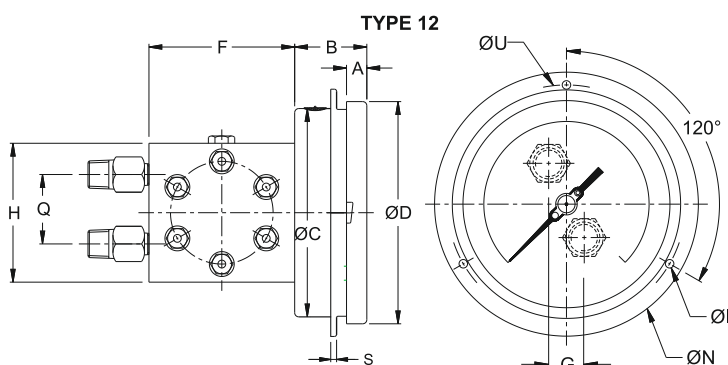
HIGH PRESSURE CHAMBER

NS	A	B	ØC	ØD	F	H	G	Q	Weight in gram (With Box)
100	12.5	47	100	111	105	100	25	54	4250.0
150	15	49	149	161	105	100	25	54	4400.0



HIGH PRESSURE CHAMBER

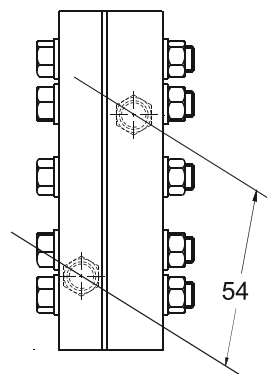
NS	A	B	ØC	ØD	F	H	G	Q	J	K	L	Weight in gram (With Box)
100	12.5	47	100	111	150	150	24	54	161	39	101	5000.0
150	15	49	149	161	150	150	24	54	161	39	101	5250.0



HIGH PRESSURE CHAMBER

NS	A	B	ØC	ØD	F	H	G	Q	Weight in gram (With Box)
100	12.5	47	100	111	105	100	25	54	4250.0
150	15	49	149	161	105	100	25	54	4400.0

DETAILS - CENTER DISTANCE



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

Range Table

Note : We offer Pressure, Vacuum and Compound ranges in Scales like kPa, MPa, bar, psi, kg/cm² & Dual Scale like kPa with psi, kPa with bar, bar with psi or scales as per the requirement can be provided on request. Following are the example tables for kg/cm² & psi scales

Pressure range (Single Scale)

Low Pressure			High Pressure		
mmWC	mmWC	mmWC	kg/cm ²	kg/cm ²	kg/cm ²
0/250	0/1000	0/4000	0/1	0/2.5	0/10
0/400	0/1600	0/6000	0/1.6	0/4	
0/600	0/2500		0/2	0/7	

Note : Other Scale are available on customer request.

Accessories (refer datasheet for complete specifications)

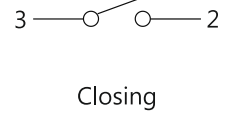
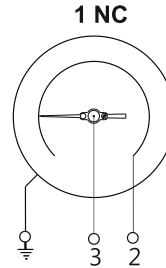
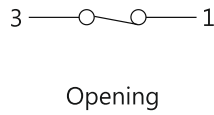
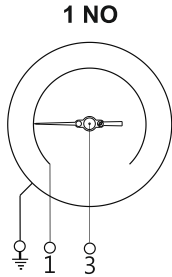
* Manifolds

* Refer catalogue for Valves & Manifolds

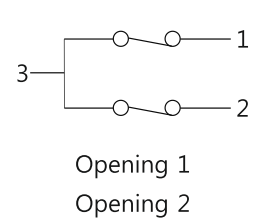
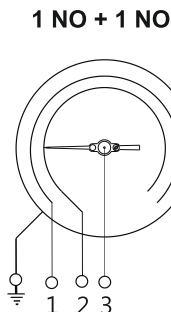
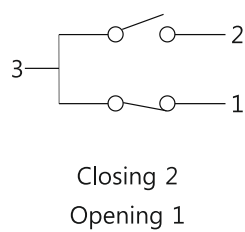
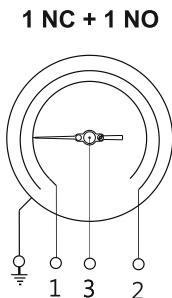
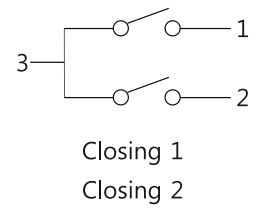
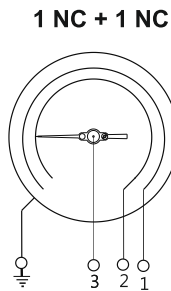
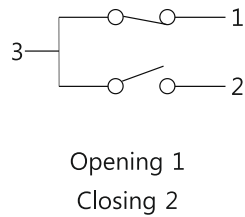
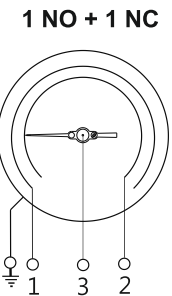
Electrical Contact Wiring Information

Wiring diagrams for electric contacts

Single Contact



Double contact





a unique innovation, with trust and quality...

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Electrical Contact Wiring Information					Example	
Basic Model					DD1	
Code						
Nominal Size			40	60		
			100 mm	150 mm		
Type of Mounting						
1	Wall / surface / projection mounting with bottom entry					
2	Direct bottom entry				X	
6	2" pipe / yoke mounting bottom entry (mounting bracket will be provided of steel epoxy painted.)				OR	
12	Center back entry with front flange (suitable for high pressure chamber only)				XX	
Gauge Process Connection (* These connections are provided through adaptors.)						
4BM	1/4" NPT (M) x 1/2" BSP (M) X 2 Nos.*	4BF	1/4" NPT (M) x 1/2" BSP (F) X 2 Nos.*	2NF	1/4" NPT (F) X 2 Nos. (Standard)	XXX
4NM	1/4" NPT (M) x 1/2" NPT (M) X 2 Nos.*	4NF	1/4" NPT (M) x 1/2" NPT (F) X 2 Nos.*			
Diaphragm						
SP	Spring Steel With PTFE Coating (Standard for Ranges 0.6 kg/cm ² and Above)				XX	
S6	AISI 316 SS (Standard for Pressure Ranges Below 0.6 kg/cm ²)					
Chamber						
S4	AISI 304 SS (Standard)	S6	AISI 316 SS		XX	
Range						
Refer range table					0/2 kg/cm ²	
Options						
CBS	AISI 316 SS case & bezel	CNS	Conformity as per NACE Standard			
LGF	Dampening liquid glycerine	TRC	Calibration certificate traceable to			
LSI	Dampening liquid silicon oil**		National/International standards		XXX	
CDD	Custom designed dial	MTC	Material test certificates#			
TND	Dial tag marking	PY4	2" pipe/yoke mounting bracket (AISI 304 SS)			
STP	SS tag plate	PY6	2" pipe/yoke mounting bracket (AISI 316 SS)			
MRP	Maximum reading pointer with plexi glass (for dry version)*	DOF	Dielectric oil filled**			
* For ranges 2.5 kg/cm ² and above. ** Gasket & plug of Viton.						
# Material test certificates will be provided for wetted parts only with chemical composition testing. For others, Please consult factory						
Electric Contacts (CE Approved)						
(For dry version, with ingress protection up to IP 55 & poly carbonate dome as a window)						
A) Single insulated magnetic snap action type (230 V AC, 1 Amp.)(48 V DC, 0.5 Amp.) (Available for 1 kg/cm ² & above)			B) Inductive type (220 V AC, 0.4 Amp.) (Available for 1000 mm WC & above)			
M1	Single; normally closed (1 NC)		D1	Single; normally open (1 NO)		
M2	Double; normally closed + normally open (1 NC + 1 NO)		D2	Single; normally closed (1 NC)		
M3	Single; normally open (1 NO)		D3	Double; normally closed + normally open (1 NC + 1 NO)		XX
M4	Double; normally open + normally closed (1 NO + 1 NC)		D4	Double; normally open (both NO)		
M5	Double; normally closed (both NC)		D5	Double; normally closed (both NC)		
M6	Double; normally open (both NO)		D6	Double; normally open + normally closed (1 NO + 1 NC)		
Ordering Example: DD1 - XX - X OR XX - XXX - XX - XX - 0/2 kg/cm ² - XXX - XX						

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.