



Differential Pressure Gauge **Double Diaphragm Type** 

#### Special Features

Case & measuring system in SS

Static pressure up to 200 kg/cm² (on request)

Dry or liquid filled

Accuracy upto 1.6% F. S.

Standard followed in general EN 837-3

C€ approved electrical contacts

#### **Application**

Chemicals Power Refinery Cement Nuclear Sugar

Aerospace Food & Beverages

Fertilizer Pulp

Petrochemicals Paper & allied Process Industries

Pharmaceutical

#### **Specifications**

Standard Version: 100 mm & 150 mm

Accuracy ±1.6% of F.S. (For ascending order)

Ambient temperature - 25°C to + 65°C Max 100°C Process temperature

Static pressure (on request) 10 kg/cm<sup>2</sup> up to ranges 600 mmWC

40 kg/cm<sup>2</sup> for ranges 1000 mmWC to 2500 mmWC

100 kg/cm<sup>2</sup> for ranges 4000 mmWC & above

Over pressure limit 130% of Max. scale value

Case & Bezel AISI 304 SS (Bayonet Type) Diaphragm AISI 316L SS (Double Diaphragm)

Nuts & Bolts AISI 304 SS **Process Connection** Body: AISI 316 SS

Thread Connection: 1/4" NPT (F) x 2 Nos.

Movement AISI 304 SS With Internal Limits stops for Min. & Max. Pressure

Protection

Dial Aluminium, black graduation on white background Pointer Aluminium, black coloured, Micrometer Zero Adjustable

Window Shatterproof / Safety Glass

Case Gasket Neoprene

Element Chamber Filling Silicon Oil (Others on request)

Diaphragm Sealing Gasket Viton

Scale Amplitude 100° to 270° (Depends on Range)

### Glycerine filled version (option LGF)

±2.5 % of F. S.(For ascending order) Accuracy

**Ambient Temperature** Maximum 65°C **Process Temperature** Maximum 65°C Window Plexi Glass Glycerine 99.7% Dampening Liquids

(others available as option)

Other Features Refer Specification of Standard Version

#### \* Please specify contact set points while ordering.

#### Electrical contacts - dry version

±2.5% of F. S.(For ascending order) Accuracy

**Ambient Temperature** Maximum 65°C **Process Temperature** Maximum 65°C Window Polycarbonate Dome Dielectric Oil (Optional) Dampening Liquids **Electrical Contacts\*** Refer How to Order

Other Features Refer Specification of Standard Version

#### Temperature effect:

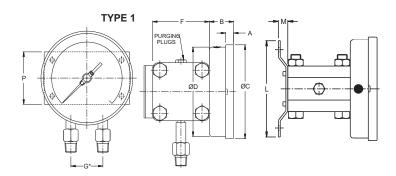
The variation of indication caused by effects of temperature is to be calculated by below formula; which is to be added in the specified accuracy while measurement: Formula: ± 0.08 x (t2 - t1) % of F. S. where t1 = reference temperature (+20°C) and t2 = ambient temperature in °C. Note: The addition of 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.)



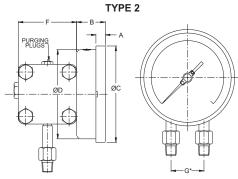
# DD2

## Differential Pressure Gauge Double Diaphragm Type

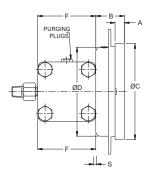
#### **Dimensions - standard version**

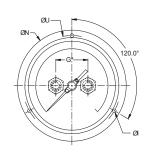


NS	Α	В	øс	ØD	F	G*	М	L	Р	Weight in gram (With Box)
100	12.5	47	111	100	99	54	15	150	90	6450.0
150	15	49	161	149	99	54	15	150	90	6750.0



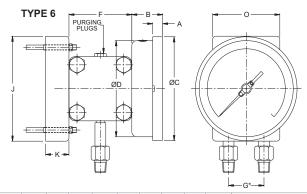
NS	Α	В	øс	ØD	F	G*	Weight in gram (With Box)
100	12.5	47	111	100	99	54	6150.0
150	15	49	161	149	99	54	6400.0





TYPE 12

NS	Α	В	øс	ØD	s	ØI	ØN	øυ	F	G*	Weight in gram (With Box)
100	12.5	47	111	100	1	6	134	118	99	54	6250.0
150	15	49	161	149	1	6	186	168	99	54	6500.0



NS	Α	В	øс	ØD	F	G*	J	ĸ	0	Weight in gram (With Box)
100	12.5	47	111	100	99	54	161	39	101	7250.0
150	15	49	161	149	99	54	161	39	101	7450.0

Notes: • Drawings are not to scale. • All Dimensions are in mm. • NS = Nominal Size. • \*Connections shown in drawings are optional.

#### 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		kg/cm²	kg/cm²		
0/600	0/2500		0/1	0/2.5		
0/1000	0/4000		0/1.6	0/4		
0/1600	0/6000		0/2	0/6		

Note: Other Scale are available on customer request.

#### Accessories (refer datasheet for complete specifications)

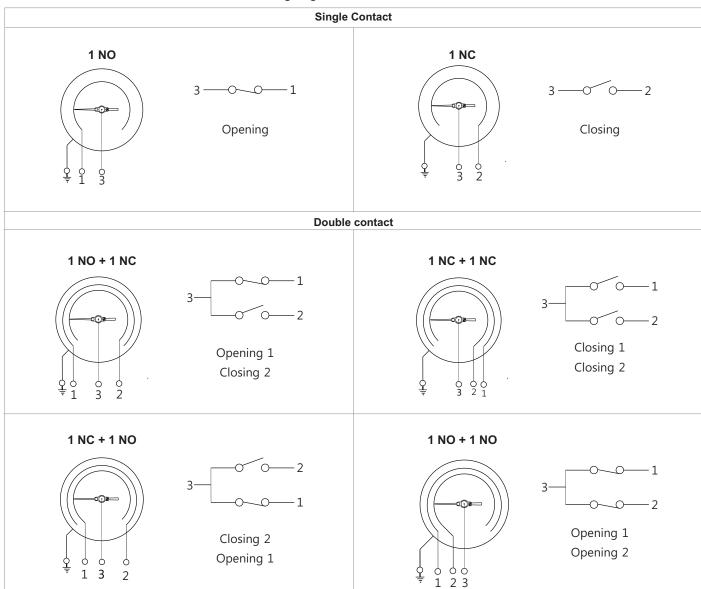
- \* Manifolds
- \* Refer catalogue for Valves & Manifolds



# DD2 Differential Pressure Gauge Double Diaphragm Type

# **Electrical Contact Wiring Information**

#### Wiring diagrams for electric contacts





## **Differential Pressure Gauge** Double Diaphragm Type

How T	o Order								Example
Basic I	Model								DD2
Code									
Nomina	al Size						40	60	X
							100 mm	150 mm	^
Type o	f Mounting								
1	Wall / surface / projection mounting with b	otton	n entry						V
2	Direct bottom entry								X OR
6	2" pipe / yoke mounting bottom entry (mo		-				poxy painted.)		XX
12	Center back entry with front flange (suitab					у)			
	s Connection (* These connections are p				·		* 611 4(11)	T (T) \ ( 0 \ )	
4BM 4NM	. ,			, ,	E" BSP (F) E" NPT (F)			Γ (F) X 2 Nos. (St	tandard) XXX
Note: 1	) For selection of Diaphragm Seals, refer in	dividu	ual dat	a sheets fo	r Diaphrag	m Seale	ed.		
(The ca	apillary length shall be maximum up to 3 me	ters 8	k range	e shall be a	above 1 kg	/cm².)			
Diaphr	agm								
SL /	AISI 316L SS	МО	MON	EL					XX
Centra	l Chamber								
S4 /	AISI 304 SS (Standard)	S6	AISI	316 SS		MO	MONEL		XX
Side C	hamber (wetted parts)								
S6 /	AISI 316 SS (Standard)	S4	AISI	304 SS		MO	MONEL		XX
Filling	Fluid								
S1 :	SILICON DC 200 [-40 TO 205°C / -40 TO 40	01°F]	(Stand	dard)					XX
Range									
Refer ra	ange table								0/2
Option	s								kg/cm²
CBS	AISI 316 SS case & bezel		CNS	Conform	ity as per N	IACE St	andard		
	Dampening liquid glycerine		TFC		on certifica				
	Dampening liquid silicon oil**			National/	Internation	al stand	ards		XXX
	Custom designed dial		MTC		test certific				7001
	Dial tag marking		Py4				ket (AISI 304 SS)		
	SS tag plate  Maximum reading pointer with plexi glass		Py6 DOF		oke mount oil filled**	ing brac	ket (AISI 316 SS)		
	(for dry version)*		DOI	Dielectric	, on mieu				
* For ra	inges 2.5 kg/cm² and above. ** Gasket & place the control of the c				nical comp	osition to	esting. For others	, Please consult	factory
	c Contacts ( CE Approved)	F ~					<u> </u>		,
	version, with ingress protection up to IP 55	5 & p	olv cai	bonate do	me as a w	ndow)			
	gle insulated magnetic snap action type	-	.,				V AC, 0.4 Amp.)		
(230 V	AC, 1 Amp.)(48 V DC, 0.5 Amp.)				-		n WC & above )		
Availa	ble for 1 kg/cm² & above)			•					
M1	Single; normally closed (1 NC)			D1			open (1 NO)		
M2	Double; normally closed + normally open (	1 NC	+ 1 N				closed (1 NC)	h	1 NO)
M3 M4	Single; normally open (1 NO)  Double; normally open + normally closed (	1 NIO	1 4 N	D3 C) <b>D4</b>	-		y closed + normal y open (both NO)	ıy open (1 NC +	· 1 NO) XX
M5	Double; normally closed (both NC)	INO	TIN	D5			y closed (both NC)	)	
M6	Double; normally open (both NO)			D6			y open + normally		· 1 NC)

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.