Double Diaphragm Differential Pressure Gauge

Description & Features

- Ranges 0-25 mbar up to 0-25 bar
- Scale angle 270°
- Accuracy class 1.6%

Specifications

Dial Size

4"(100mm), 6"(150mm) White aluminum with black figures

Pressure range

0.36psi upto 360psi (25mbar upto 25bar)

Case

304 stainless steel case and ring - bayonet bezel

Pressure element

AISI 316Ti 1.4571 st. st. independent diaphragms

Pointer

Aluminum with micrometer adjustable

Differential cell

material:

AISI 316L stainless steel;

Monel (Code: SD);

Hastelloy C276 (Code: SE)

Sizes:

160mbar-25bar, mm 100×100

25mbar-100mbar, mm 150×150

Window

Polycarbonate

Differential element filling liquid

silicone fluid (standard)

food compatible fluid (on request)

Differential cell gaskets

nitril rubber (NBR), standard FPM (viton) on request

Movement

Stainless Steel

Torsion shaft

Stainless Steel

Connection

Standard 1/4"NPT female

Unit of pressure

mbar, bar, kPa, kg/cm² and psi for single or double scale(on request)

Scale angle

270°(scale angle is 180° with ranges 0/25 mbar)

Static pressure

for all scale range, apart from the pressure entry in one or both connections:

Static pressure 100bar for range: 160mbar-25bar Static pressure 25bar for range: 25mbar-100mbar Static pressure 100bar for range: 25mbar-100mbar

(on request-option SY)

Static pressure 200bar for range: 160mbar-25bar

(on request-option SX)

Ambient Temperature

-4°F to 140°F(-20°C to 60°C)

Working Temperature

Maximum 120°C/248°F

Protection

IP 55

Thermal drift

With reference to the ambient temperature of 20°C, thermal drift affects the instrument accuracy as ±0.6% every 10°C of variations.

Accuracy

Class 1.6 (±1.6% of full scale deflection)

Trasparente

Note 1: accuracy indicated on the pressure gauge does not consider the interference of an eventually applied electric contact.

Note 2: Standard high pressure port is on the right Note 3: diaphragm seal affects the accuracy of the instruments according to DS series Catalog according to working temperature.

See DS series Diaphragm Seals page 25

Order Information

Series/ Dial Size/ Case Materials/ Wetted Parts/ Configuration/ Connection Size/ Thread/ Range/ Option



Double Diaphragm Differential Pressure Gauge

		Ordering Code PDD Series
Field No.	Code	Specifications
1.	PDD	Series
		Dial Size
2.	40	4" (100mm)
۷.	60	6" (150mm)
		Case Material
3.	Т	AISI 304 stainless steel
	S	AISI 316 stainless steel
		Wetted Parts Material
4.	S	AISI 316 stainless steel
	L	AISI 316L stainless steel
	Н	Hastelloy C
	M	Monel
	Z	Special request
5.	Δ.	Configuration
J.	A B	Direct mounting (Bottom) Surface mounting with clamp (Bottom)
	С	Back panel flush mounting (Bottom)
	D	2" pipe mounting (Bottom)
		Process Connection Size
6.	4	1/4"
	2	1/2"
	Z	Special request
		Process Connection Thread
7.	NF	NPT Female
	GF	G Female
	NM	NPT Male
	GM	G Male
8.	ZZ	Special request Range (XXXX)
0.		range (AAAA)
		mbar 0/25 0/40 0/60 0/100 0/160 0/250 0/400 0/600
		bar 0/1 0/1.6 0/2.5 0/4 0/6 0/10 0/16 0/25
		Options
9.	S3	316 case and ring
	SV	Laminated safety glass
	SQ	Silicone fluid
	SF	Fluoride fluid for cryogenic applications (-50°C60°C)
	I	
	SZ	Protection degree IP 55
	SM	Protection degree IP 55 Maximum adjustable pointer
	SM 10	Protection degree IP 55 Maximum adjustable pointer Accuracyn 1.0
	SM 10 SS	Protection degree IP 55 Maximum adjustable pointer Accuracyn 1.0 Oxygen clean (High pressure port is on the left)
	SM 10 SS SL	Protection degree IP 55 Maximum adjustable pointer Accuracyn 1.0 Oxygen clean (High pressure port is on the left) High pressure port is on the left (Non oxygen clean request)
	SM 10 SS SL SC	Protection degree IP 55 Maximum adjustable pointer Accuracyn 1.0 Oxygen clean (High pressure port is on the left) High pressure port is on the left (Non oxygen clean request) Surface mounting with clamp
	SM 10 SS SL SC SH	Protection degree IP 55 Maximum adjustable pointer Accuracyn 1.0 Oxygen clean (High pressure port is on the left) High pressure port is on the left (Non oxygen clean request) Surface mounting with clamp Back panel flush mounting
	SM 10 SS SL SC SH SX	Protection degree IP 55 Maximum adjustable pointer Accuracyn 1.0 Oxygen clean (High pressure port is on the left) High pressure port is on the left (Non oxygen clean request) Surface mounting with clamp Back panel flush mounting Static pressure 250 bar for ranges included between 100 mbar and 25 bar
	SM 10 SS SL SC SH SX	Protection degree IP 55 Maximum adjustable pointer Accuracyn 1.0 Oxygen clean (High pressure port is on the left) High pressure port is on the left (Non oxygen clean request) Surface mounting with clamp Back panel flush mounting Static pressure 250 bar for ranges included between 100 mbar and 25 bar Static pressure 400 bar for ranges included between 100 mbar and 25 bar
	SM 10 SS SL SC SH SX SY	Protection degree IP 55 Maximum adjustable pointer Accuracyn 1.0 Oxygen clean (High pressure port is on the left) High pressure port is on the left (Non oxygen clean request) Surface mounting with clamp Back panel flush mounting Static pressure 250 bar for ranges included between 100 mbar and 25 bar Static pressure 400 bar for ranges included between 100 mbar and 25 bar Static pressure 100 barfor ranges included between 25 mbar and 100 mbar
	SM 10 SS SL SC SH SX	Protection degree IP 55 Maximum adjustable pointer Accuracyn 1.0 Oxygen clean (High pressure port is on the left) High pressure port is on the left (Non oxygen clean request) Surface mounting with clamp Back panel flush mounting Static pressure 250 bar for ranges included between 100 mbar and 25 bar Static pressure 400 bar for ranges included between 100 mbar and 25 bar Static pressure 100 barfor ranges included between 25 mbar and 100 mbar Exotic materials diaphragm,monel
	SM 10 SS SL SC SH SX SY SK SD	Protection degree IP 55 Maximum adjustable pointer Accuracyn 1.0 Oxygen clean (High pressure port is on the left) High pressure port is on the left (Non oxygen clean request) Surface mounting with clamp Back panel flush mounting Static pressure 250 bar for ranges included between 100 mbar and 25 bar Static pressure 400 bar for ranges included between 100 mbar and 25 bar Static pressure 100 barfor ranges included between 25 mbar and 100 mbar
	SM 10 SS SL SC SH SX SY SK SD SE	Protection degree IP 55 Maximum adjustable pointer Accuracyn 1.0 Oxygen clean (High pressure port is on the left) High pressure port is on the left (Non oxygen clean request) Surface mounting with clamp Back panel flush mounting Static pressure 250 bar for ranges included between 100 mbar and 25 bar Static pressure 400 bar for ranges included between 100 mbar and 25 bar Static pressure 100 barfor ranges included between 25 mbar and 100 mbar Exotic materials diaphragm,monel Exotic materials diaphragm,hastelloy C276 Monel wetted parts minimum pressure range available 0600 mbar on 180° or ranges included between
	SM 10 SS SL SC SH SX SY SK SD SE SB	Protection degree IP 55 Maximum adjustable pointer Accuracyn 1.0 Oxygen clean (High pressure port is on the left) High pressure port is on the left (Non oxygen clean request) Surface mounting with clamp Back panel flush mounting Static pressure 250 bar for ranges included between 100 mbar and 25 bar Static pressure 400 bar for ranges included between 100 mbar and 25 bar Static pressure 100 barfor ranges included between 25 mbar and 100 mbar Exotic materials diaphragm,monel Exotic materials diaphragm,hastelloy C276 Monel wetted parts minimum pressure range available 0600 mbar on 180° or ranges included between 25 mbar and 100 mbar and 25 bar
	SM 10 SS SL SC SH SX SY SK SD SE SB	Protection degree IP 55 Maximum adjustable pointer Accuracyn 1.0 Oxygen clean (High pressure port is on the left) High pressure port is on the left (Non oxygen clean request) Surface mounting with clamp Back panel flush mounting Static pressure 250 bar for ranges included between 100 mbar and 25 bar Static pressure 400 bar for ranges included between 100 mbar and 25 bar Static pressure 100 barfor ranges included between 25 mbar and 100 mbar Exotic materials diaphragm,monel Exotic materials diaphragm,hastelloy C276 Monel wetted parts minimum pressure range available 0600 mbar on 180° or ranges included between 25 mbar and 100 mbar and 25 bar Monel wetted parts minimum pressure range available 0600 mbar on 180° for ranges included between 25 mbar and 100 mbar Hastelloy C276 wetted parts minimum pressure range available 0600 mbar on 180° for ranges included

Double Diaphragm Differential Pressure Gauge

Option 1

Maximum adjustable pointer
Laminated Safety Glass
Protection degree IP65
Oxygen cleaning
Silicone fluid
Accuracy 1.0%
2" pipe mounting
Surface mounting with clamp
Back panel flush Mounting
316 case and ring
200bar static pressure
Monel 400 wetted parts
Hastelloy C276 wetted parts
Static pressure 100 bar for range 25 mbar-100mbar
Other connection size available

** The table shows the static pressure values aparts from the pressure entry in one or both connections, related range.

Range	Static pre	ssure (bar)	Danas	Static pressure (bar			
	Standard	Special	Range	Standard	Special		
0-25 mbar	25	100	0-160 mbar	100	200		
0-40 mbar	25	100	0-250 mbar	100	200		
0-60 mbar	25	100	0-400 mbar	100	200		
0-100 mbar	25	100	0-600 mbar	100	200		

Option 2

Diaphragm seals(see DS series)

with stainless steel or exotic material diaphragm, with an appropriate bigger diameter, are applicable to instrument she with ranges included between 60 mbar and 25 bar; in this case the instrument can be identified by the number if the chosen model, adding the reference of the suitable diaphragm seal among those of DS series.

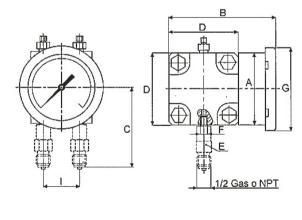
Electric contact(see ECS series)

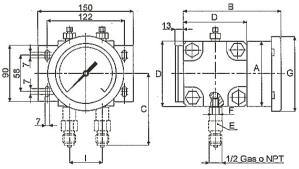
the instrument can be identified by the number if the chosen model, adding the reference of the switching action as shown in table of ECS series. Differential pressure gauges equipped with electric contacts are available in dry execution only.

Accessories(see W series) manifold valve.

Danas	Static pre	ssure (bar)	Danas	Static pressure (bar)			
Range	Standard	Special	Range	Standard	Special		
0-1 bar	100	200	0-6 bar	100	200		
0-1.6 bar	100	200	0-10 bar	100	200		
0-2.5 bar	100	200	0-16 bar	100	200		
0-4 bar	100	200	0-25 bar	100	200		

Dimensions





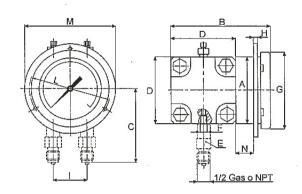
PDD - A
Pressure gauge for Direct Mounting (Bottom)

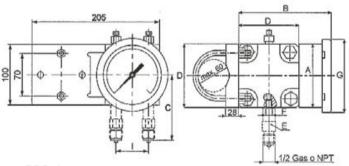
	_	_					•		
Model	DN	А	В	O	D	ш	F	G	1
(160mbar- 25bar)	100	103	150	112	100	22	1/4	118	54
	150	150	150	112	100	22	1/4	166	54
(25mbar- 100mbar)	100	103	200	137	150	22	1/4	118	54
	150	150	200	137	150	22	1/4	166	54

PDD - B Pressure gauge for surface mounting with clamp

Model	DN	Α	В	O	D	ш	Ш	G	1
(160mbar- 25bar)	100	103	150	112	100	22	1/4	118	54
	150	150	150	112	100	22	1/4	166	54
(25mbar- 100mbar)	100	103	200	137	150	22	1/4	118	54
	150	150	200	137	150	22	1/4	166	54

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PDD-A Pressure gauge for direct mounting



PDD-C
Pressure gauge for back panel flush mounting with 3 hole front flange



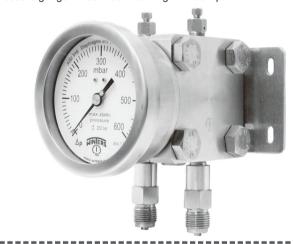
PDD - C Pressure gauge for Back panel flush Mounting (Bottom)

Model	DN	Α	В	С	D	Е	F	G	Н	I	L	М	Ν
(160mbar-	100	103	150	112	100	22	1/4	118	7	54	126	140	27
	150	150	150	112	100	22	1/4	166	7	54	178	192	27
(25mbar-	100	103	200	137	150	22	1/4	118	7	54	126	140	27
100mbar)	150	150	200	137	150	22	1/4	166	7	54	178	192	27

PDD - D Pressure gauge for 2" pipe mounting

Model	DN	А	В	С	D	Е	F	G	I
(160mbar- 25bar)	100	103	150	112	100	22	1/4	118	54
	150	150	150	112	100	22	1/4	166	54
(25mbar- 100mbar)	100	103	200	137	150	22	1/4	118	54
	150	150	200	137	150	22	1/4	166	54

PDD-B Pressure gauge for surface mounting with clamp



PDD-D

Pressure gauge for horizontal or vertical 2" pipe mounting with AISI 304 SS mounting brackets



Double Diaphragm Differential Pressure Gauge

Range: 160 mbar...25 bar



Range: 25 mbar...100 mbar



Double Diaphragm Differential Pressure Gauge

Range: 160 mbar...25 bar

