

SCHAFFER DIAPHRAGM GAUGE DMC CASE FLANGE CONNECTION



The model P91/SE Schaffer Diaphragm gauges are manufactured with a special DMC (Dough Moulding Compound) safety case and are designed for use on slurries, viscous or corrosive fluids that would normally attack or block standard bourdon tubes.

Implementing specialist materials for both the connection and diaphragm enable the Schaffer Diaphragm gauge to be configured for use on any gaseous or liquid media including suspended solids or powders. The direct drive from the diaphragm to the movement ensures a more positive indication of pressure than other models of tube gauges.

Offering a full range of flanged connection sizes and materials, Schaffer Diaphragm gauges can operate at pressure ranges as low as 30 mBar with the option to permit units to withstand a maximum pressure of 70 bar.



Size

100 mm (4")

Mounting

Direct

Case & Bezel

DMC (Dough Moulding Compound) is glass-reinforced polyester with central partition and blow out back. It has extremely high impact strength, is self-extinguishing.

Scale Ranges

0 to 30 mBar up to 25 bar Pressure / Compound ranges
Equivalent units of pressure / vacuum available
Single and dual scales are available
Option: Custom scales for special applications, i.e. tank contents

Overload

Units withstands overload pressure up to 125% of FSD
See reverse for maximum overloads for different materials

Pressure Connection

Flange Sizes 1/2", 3/4", 1", 1.5" & 2"
Rated 150, 300, 600, 900 & 1500, Raised Face
Also Available: DN15, DN20, DN 25, DN 40 & DN50 PN10-40 and 1/2", 3/4", 1", 1.5" 2" Table A-E
All Connections have a Bobin Neck assembly except flanges 1.5" & 2" 900/1500RF & DN50, where this is not required

Connection Material

Stainless Steel as standard
Options: Carbon Steel, Monel, Titanium, Hastelloy, Tantalum
Lining Options: PTFE, Halar, PDA

Diaphragm Material

316 Stainless Steel as standard
Options: Monel, Tantalum, Hastelloy, Silver or PTFE Protected
Other materials to suit application are available

Accuracy Class

1.0% of FSD as defined in EN837-1
1.5% of FSD if diaphragm is protected

Dial

White Anodised Aluminium marked in black finish
Dual scales, bands and sectors are also available
Customisation with company Name & Logo

Pointer

Aluminum coloured black
Option: Micrometer adjustable pointer for Ranges \geq 350 mBar

Movement

Brass Construction

Window

Laminated Safety Glass (Standard)
Option: Acrylic Plastic Window

Environmental Rating

IP65 as defined in EN 60 529

Traceability

All instruments are individually calibrated and have an unique Serial Number printed on the dial. A Certificate of Conformity Traceable to National Standards is Supplied Free of Charge

Certification available

BS EN 10204 3.1B Material Certification
Point by Point Test Certificate

Safety

All units are manufactured to comply with EN 837-3, specification and other regulatory standards including PED.

Installation instructions

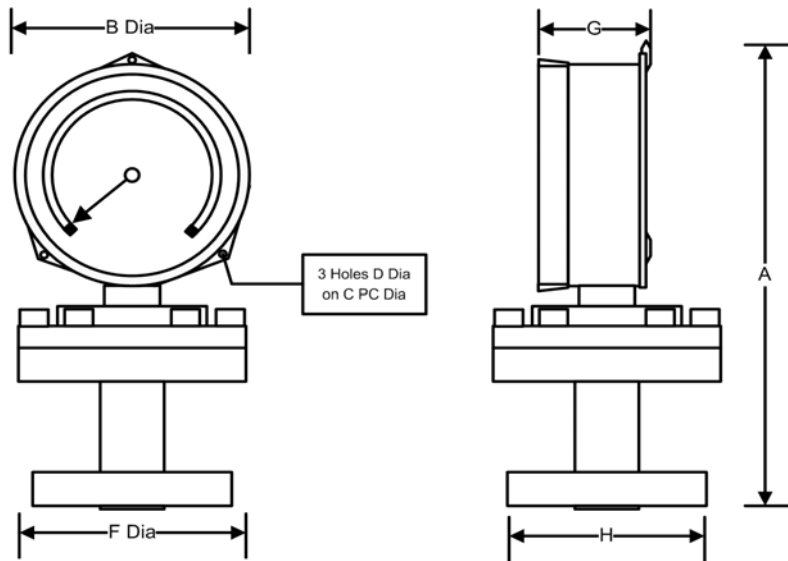
Refer to EN 837-2

Temperature

Operating: -20 to +90 °C
Storage: -40 up to +100 °C
For lower or higher operating temperatures, please contact our Sales Office

Dimensions

Model : P91/CFN 100mm



Model No	A	B	F	G	H	Weight
100mm P91/CFN	200mm	120mm	100mm	52mm	**	2.8 Kg

** Varies with Flange size.

Diaphragm Material	Ranges	Max Overload
316 Stainless Steel	30 mBar	3 times Gauge Range
	50 mBar	3 times Gauge Range
17-7 Stainless steel	80 mBar	10 times Gauge Range
	100 mBar	10 times Gauge Range
13% Cr Stainless Steel	350 mBar	35 Bar
	3.5 Bar	70 Bar
	25 Bar	70 Bar

Diaphragm Protection

Tantalum, Hastelloy and Monel above 600 mBar (10 Psi)

316L Stainless Steel above 350mBar (5 Psi)

PTFE any pressure or Vacuum, but not on gases above 600 mBar (10 Psi)

Pulsations and vibrations

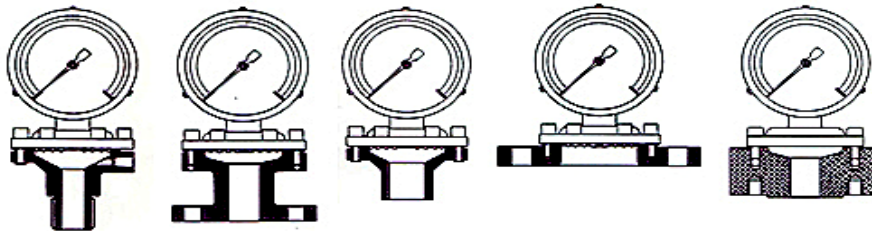
Where possible on applications where pulsations and vibration is present it is advisable to use a Diaphragm Seal

Options

Window : Acrylic Plastic Window

Connections

Contact our Sales Department for various connections (See samples below)



Specifications and dimensions in this leaflet, are subject to change without prior notice.

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