



# Budenberg



Made in Britain

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## Model: 91/CFN

The model 91/FN Schaffer Diaphragm gauges are designed for use on slurries, viscous or corrosive fluids that would normally attack or block standard bourdon tube gauges.

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

Stainless Steel fully Safety Pattern, with solid wall and blow out back, with polished Stainless Steel bezel

### 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 table of maximum overloads for different diaphragm 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

## SCHAFFER DIAPHRAGM GAUGE FLANGE CONNECTION



### Dial

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

### Pointer

Aluminium 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

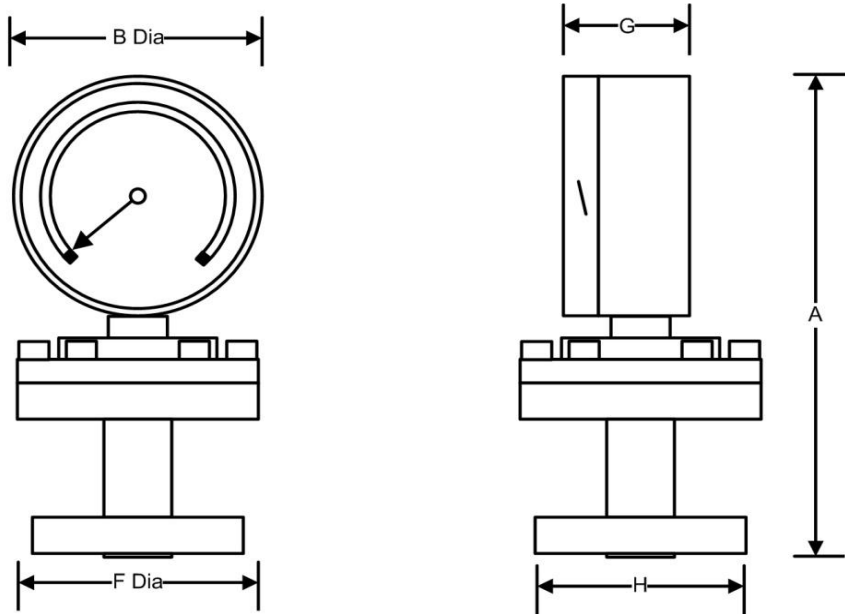
All units are manufactured to comply with EN 837-3. specification and other regulatory standards including PED.

### Installation instructions

Refer to EN 837-2

### Temperature

Operating: -10 to +60 °C  
Storage: -40 up to +100 °C  
For lower or higher operating temperatures, please contact our Sales Office



Model No	A	B	F	G	H	Weight
100mm 91/CFN	220mm	105mm	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**

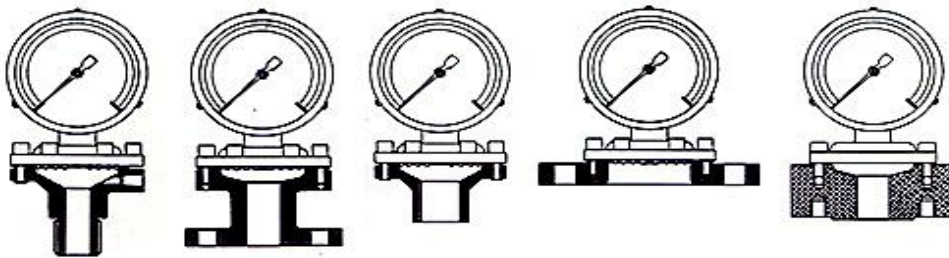
Where possible on applications where pulsations and vibration is present it is advisable to use a Diaphragm Seal

**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.