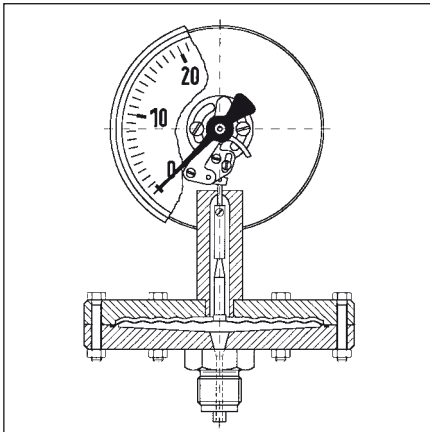


Diaphragm pressure gauges for chemical applications EN 837-3



Application

For corrosive, gaseous and liquid media and suitable for use in corrosive atmospheres. With open connecting flange also suitable for viscous and polluted media.

! When measuring gas or vapour, the instruments must be used in accordance with the safety recommendations of EN 837-2 (see appendix).

Type

D 4

Nominal size

100 – 160

Accuracy class (EN 837-3/6)

1.6

Ranges (EN 837-3/5)

0/10 to 0/250 mbar (flange Ø 160)
0/0.4 to 0/25 bar (flange Ø 100)

Application area

Static load:
full scale value

Dynamic load:
0.9 x full scale value

Overpressure safety

1.3 x full scale value
≥ 0.6 bar overpressure safety
5 x FSD, however 40 bar max.

Operating temperature range

Medium: $T_{max} = +100\text{ °C}$
Ambient: $T_{min} = -20\text{ °C}$
 $T_{max} = +60\text{ °C}$

Temperature performance

Indication error when the temperature of the measuring element deviates from 20 °C:

rising temp. approx. $\pm 0.8\text{ \%}/10\text{ K}$
falling temp. approx. $\pm 0.8\text{ \%}/10\text{ K}$
percentage of full scale value

Protection

IP 54 (EN 60529)

Standard version

Connection

Stainless steel 316 Ti or 316 L,
bottom
G¹/₂B – spanner size 22
(EN 837-3/7.3)

Lower flange

Stainless steel 316 Ti or 316 L

Upper flange

Stainless steel 316 Ti or 316 L

Measuring element

Diaphragm,
Measuring flange Ø 100:
Duratherm
Measuring flange Ø 160:
Stainless steel 316 Ti or 316 L

Sealing gasket to pressurised area

FPM (Viton)

Movement

Stainless steel

Dial

Aluminium, white
Dial marking black

Pointer

Aluminium, black

Housing

Stainless steel 304
with blow-out

Bayonet type bezel

Stainless steel 304

Front glass

Laminated safety glass

Options

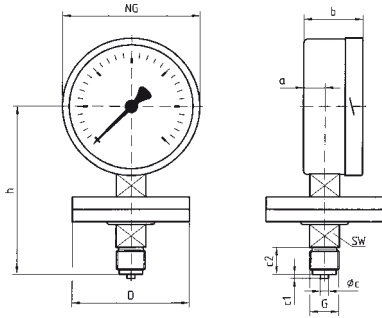
- Safety housing
- Overpressure safety 10 x FSD (flange Ø 100 up to 40 bar max., flange Ø 160 up to 2.5 bar max.)
- Glycerine filling (≥ 40 mbar, ≤ 250 mbar accuracy class 2.5)
- Wetted parts with special coating
- Open connection flanges according to EN/ANSI

Diaphragm pressure gauges for chemical applications

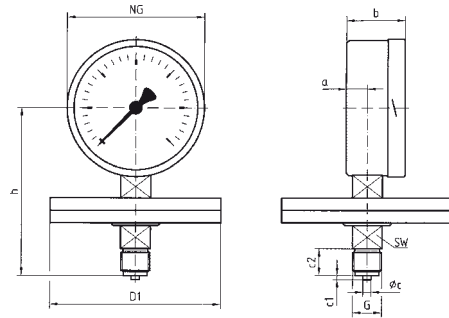
Type D 4 – NG 100/160

Housing types and dimensions

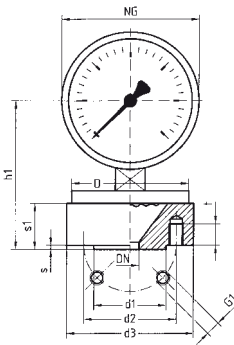
Bottom connection, measuring flange Ø 100



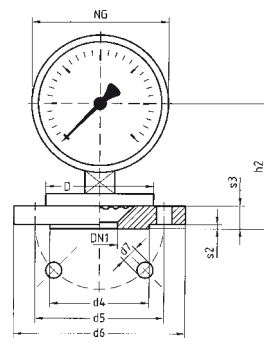
Bottom connection, measuring flange Ø 160



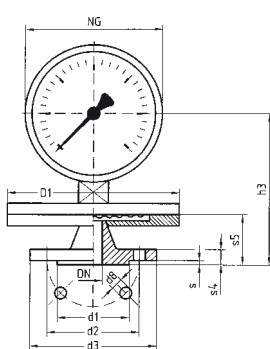
Connection flange according to EN 1092-1, DN 25 Measuring flange Ø 100



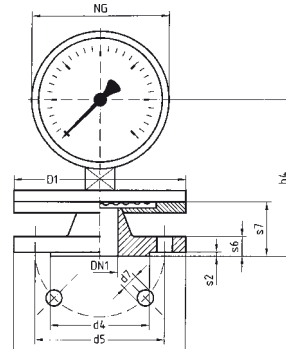
Connection flange according to EN 1092-1, DN 50 Measuring flange Ø 100



Connection flange according to EN 1092-1, DN 25 Measuring flange Ø 160



Connection flange according to EN 1092-1, DN 50 Measuring flange Ø 160



Dimensions (mm)

Nominal size (NG)	a	b	Øc	c1	c2	d1	d2	d3	d4	d5	d6	d7	d8	D	D1	DN	DN1	G	G1	h	h1
100	20	55	6	3	20	68	85	115	102	125	165	4x18	4x14	100	160	25	50	G1/2B	4xM12	127	111
160	20	55	6	3	20	68	85	115	102	125	165	4x18	4x14	100	160	25	50	G1/2B	4xM12	156	141
Nominal size (NG)	h2	h3	h4	s	s1	s2	s3	s4	s5	s6	s7	t	SW								
100	101	129	137	2	30	3	20	18	48	20	56	12	22								
160	131	159	167	2	30	3	20	18	48	20	56	12	22								