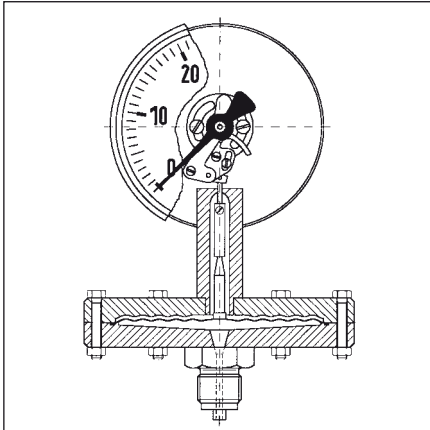


Diaphragm pressure gauges for chemical applications EN 837-3



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

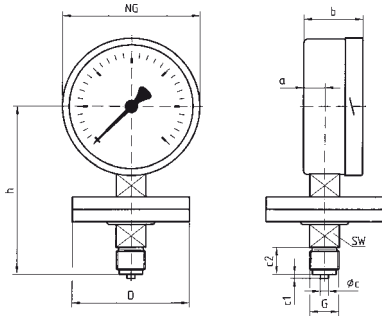
- Safety housing
- Overpressure safety 10 x FSD (flange Ø 100 up to 40 bar max., flange Ø 160 up to 2.5 bar max.)
- Glycerine filling (≥ 40 mbar, ≤ 250 mbar accuracy class 2.5)
- Wetted parts with special coating
- Open connection flanges according to EN/ANSI

Diaphragm pressure gauges for chemical applications

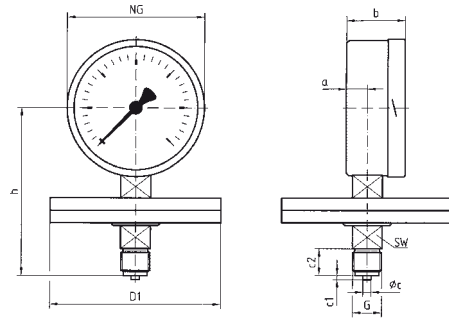
Type D 4 – NG 100/160

Housing types and dimensions

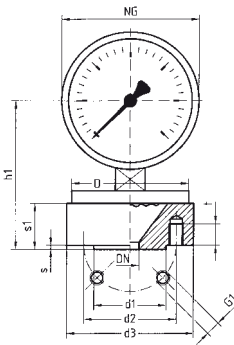
Bottom connection, measuring flange Ø 100



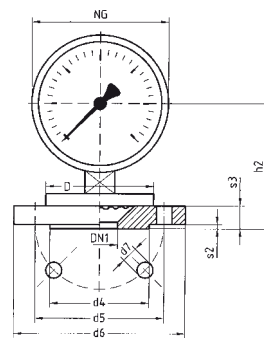
Bottom connection, measuring flange Ø 160



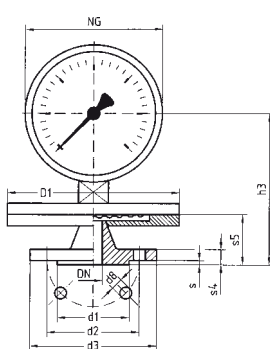
Connection flange according to EN 1092-1, DN 25 Measuring flange Ø 100



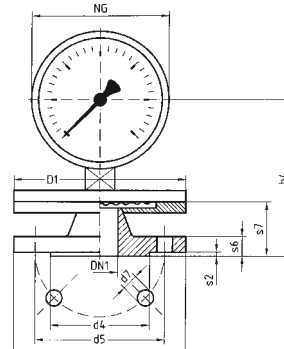
Connection flange according to EN 1092-1, DN 50 Measuring flange Ø 100



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								

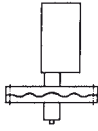
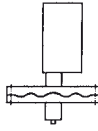
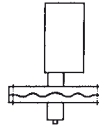
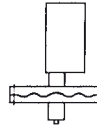
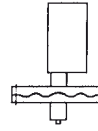
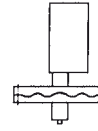
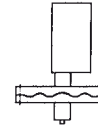

Standard diaphragm pressure gauges

Diaphragm pressure gauges for chemical applications

DG: H

with glycerine filling

with glycerine filling

Type	PF100, D401	PF160, D401	PF100Gly, D801	PF160Gly, D801	PF100Ch, D402	PF160Ch, D402	PF100CHGly, 802	PF160CHGly, 802
Version								
Housing Ø	100	160	100	160	100	160	100	160
Housing	Stainless steel 304 with bayonet type bezel							
Meas. elem.	Diaphragm, refer to data sheet							
Lower flange	Steel				Stainless steel 316 Ti or 316 L			
Accuracy class	1.6	1.6	1.6*	1.6*	1.6	1.6	1.6*	1.6*
Connection	G ¹ / ₂ B	G ¹ / ₂ B	G ¹ / ₂ B	G ¹ / ₂ B	G ¹ / ₂ B	G ¹ / ₂ B	G ¹ / ₂ B	G ¹ / ₂ B
Range (mbar)	Part no.	Part no.	Part no.	Part no.	Part no.	Part no.	Part no.	Part no.
Price €								
0/10	85901401	85951401	---	---	85901402	85951402	---	---
0/16	85902401	85952401	---	---	85902402	85952402	---	---
0/25	85903401	85953401	---	---	85903402	85953402	---	---
0/40	85904401	85954401	85904801	85954801	85904402	85954402	85904802	85954802
Price €								
0/60	85905401	85955401	85905801	85955801	85905402	85955402	85905802	85955802
0/100	85906401	85956401	85906801	85956801	85906402	85956402	85906802	85956802
0/160	85907401	85957401	85907801	85957801	85907402	85957402	85907802	85957802
0/250	85908401	85958401	85908801	85958801	85908402	85958402	85908802	85958802
Range (bar)								
Price €								
0/0.4	85909401	85959401	85909801	85959801	85909402	85959402	85909802	85959802
0/0.6	85910401	85960401	85910801	85960801	85910402	85960402	85910802	85960802
0/1	85911401	85961401	85911801	85961801	85911402	85961402	85911802	85961802
0/1.6	85912401	85962401	85912801	85962801	85912402	85962402	85912802	85962802
0/2.5	85913401	85963401	85913801	85963801	85913402	85963402	85913802	85963802
0/4	85914401	85964401	85914801	85964801	85914402	85964402	85914802	85964802
0/6	85915401	85965401	85915801	85965801	85915402	85965402	85915802	85965802
0/10	85916401	85966401	85916801	85966801	85916402	85966402	85916802	85966802
0/16	85917401	85967401	85917801	85967801	85917402	85967402	85917802	85967802
0/25	85918401	85968401	85918801	85968801	85918402	85968402	85918802	85968802

* ≤ 250 mbar class 2.5 – Refer to page 384 for additional costs.