

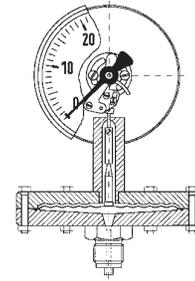
# Diaphragm pressure gauges for chemical applications

EN 837-3

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- For low pressure ranges
- High overload protection
- High resistance
- Optional flange connections



**Application** For corrosive gaseous and liquid media, also for use in corrosive environments. With open connection flange also suitable for viscous and polluted media.  
! For measuring gas or vapour, these gauges must be used in accordance with the table "Selection Criteria as per EN 837-2" (see appendix)!

## Technical specifications

### 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

High overload: Up to 5 x FSD,  
max. 40 bar / max. 2,5 bar  
with measuring flange Ø 160 mm

### 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 system deviates from the normal temperature of 20 °C:

rising temperature approx.  $\pm 0.8\text{ \%/10 K}$ falling temperature approx.  $\pm 0.8\text{ \%/10 K}$ 

of full scale value

### Degree of protection

IP 54 (EN 60529)

## Standard version

### Connection

Stainless steel 316 Ti/316 L, bottom  
G½B – spanner size SW 22 (EN 837-3/7.3)

### Lower measuring flange

Stainless steel 316Ti/316L

### Upper measuring flange

Stainless steel 304

### Measuring element

Diaphragm

Measuring flange Ø 100: Duratherm

Measuring flange Ø 160:  
stainless steel 316 Ti/316 L

### Seal

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

### Window

Laminated safety glass

## Options

- Safety housing
- Overpressure safety 10 x FSD  
(measuring flange Ø 100 to max. 40 bar,  
measuring flange Ø 160 to max. 2.5 bar)
- Electrical contacts
- Glycerine filling ( $\geq 40$  mbar,  
 $\leq 250$  mbar accuracy class 2.5)
- Wetted parts with special coating
- Open connection flanges as per EN/ASME

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See page 128  
for prices.

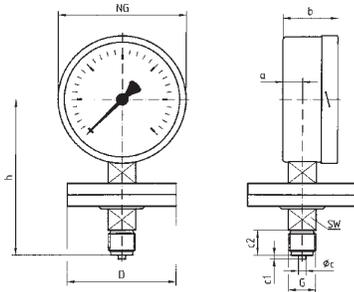
# Diaphragm pressure gauges for chemical applications

Type D 4 – NG 100/160

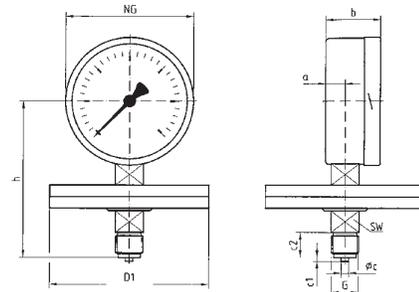
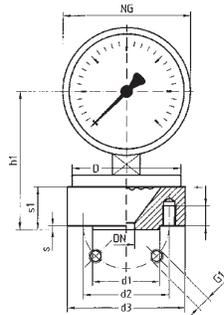
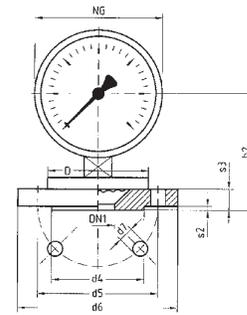
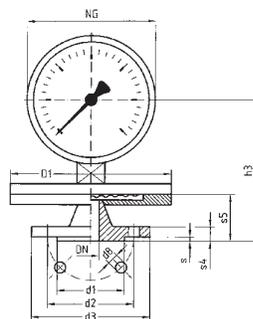
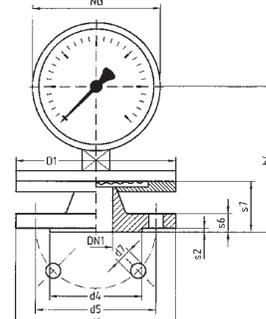
## Housing types and dimensions

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Bottom connection, measuring flange Ø 100



Bottom connection, measuring flange Ø 160

Connection flange as per EN 1092-1, DN 25  
Measuring flange Ø 100Connection flange as per EN 1092-1, DN 50  
Measuring flange Ø 100Connection flange as per EN 1092-1, DN 25  
Measuring flange Ø 160Connection flange as per 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	G½B	4xM12	127	111
160	20	55	6	3	20	68	85	115	102	125	165	4x18	4x14	100	160	25	50	G½B	4xM12	156	141

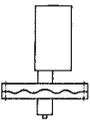
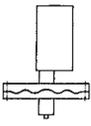
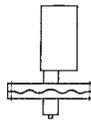
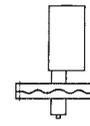
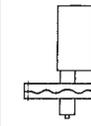
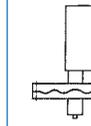
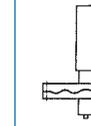
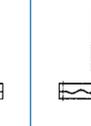
Nominal size (NG)	h2	h3	h4	s	s1	s2	s3	s4	s5	s6	s7	t	SW
100	101	129	137	2	30	3	20	18	48	20	56	12	22
160	131	159	167	2	30	3	20	18	48	20	56	12	22

# Standard diaphragm pressure gauges

# Diaphragm pressure gauges for chemical applications

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DG: H, PG: 3

Type	With glycerine filling				With glycerine filling			
	PF100, D401	PF160, D401	PF100Gly, D801	PF160Gly, D801	PF100Ch, D402	PF160Ch, D402	PF100ChGly, D802	PF160ChGly, D802
Version								
Housing Ø	100	160	100	160	100	160	100	160
Housing	Stainless steel 304 with bayonet bezel							
Measuring element	Diaphragm, see data sheet.							
Lower flange	Steel				Stainless steel 316Ti/316L			
Accuracy class	1.6	1.6	1.6*	1.6*	1.6	1.6	1.6*	1.6*
Connection	G½B	G½B	G½B	G½B	G½B	G½B	G½B	G½B
Range (mbar)	Part no.	Part no.	Part no.					
<b>Price €</b>								
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
<b>Price €</b>								
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)	Part no.	Part no.	Part no.					
<b>Price €</b>								
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

Blue part no. = in-stock items

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\* ≤ 250 mbar cl. 2.5, see page 129 for extra charges.