

Stainless steel diaphragm pressure gauges



EN 837-3

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- Robust and compact design
- Various process connections possible
- Flush mounted versions without transmission liquid
- Welded, so no seals required in wetted area
- GOSSTANDART-certified
- ATEX version (optional)



Application For corrosive gaseous and liquid media, also for use in corrosive environments. With open connection flange also suitable for viscous and polluted media; with hygienic connections specially suitable for pharmaceutical processes.
! 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)

0/100 mbar to 0/25 bar

Application area

Static load: full scale value
Dynamic load: 0.9 x full scale value

Overpressure safety

Overpressure safety 5 FSD,
however, max. 60 bar

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 65 (EN 60529)
with housing vent ($\leq 25\text{ bar}$): IP 54

Standard version

Connection

Stainless steel 316, bottom
G $\frac{1}{2}$ B – spanner size SW 22 with channel hole 10 mm

Lower measuring flange

Stainless steel 316Ti/316L

Upper measuring flange

Stainless steel 316 L

Measuring element

Diaphragm
100 mbar to 2.5 bar stainless steel 316 Ti/316 L
4 bar to 25 bar Duratherm

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

- Glycerine filling ($\geq 4\text{ bar}$)
- Wetted parts with special coating
- Clamp connection
- Varivent or BioControl connection
- ATEX version
- Flush mounted connection flanges as per EN
- Open connection flanges as per EN/ANSI
- Other connection threads
- Electrical contacts ($\geq 0/0.6\text{ bar}$)

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See page 122 for prices.

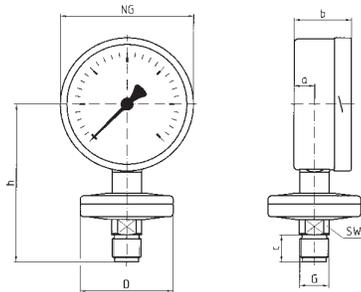
Stainless steel diaphragm pressure gauges

Type D 4 – NG 100/160

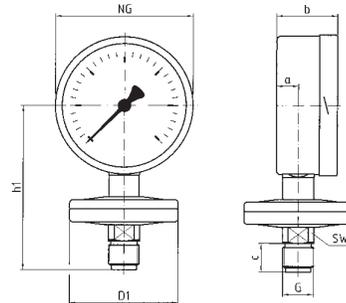
Housing types and dimensions

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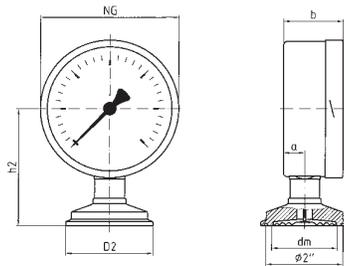
Bottom connection, 0/100 mbar to 0/2.5 bar



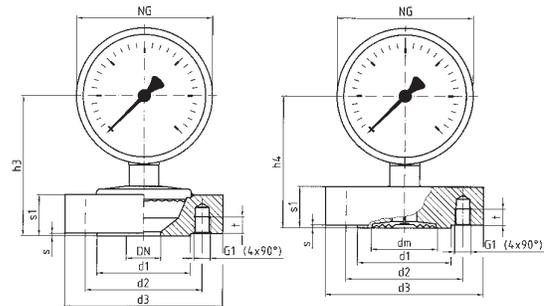
Bottom connection, 0/4 mbar to 0/25 bar



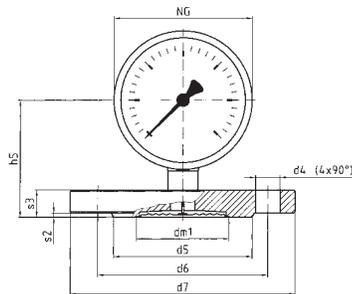
Clamp connection 2" as per ISO 2852, 0/1 bar to 0/6 bar



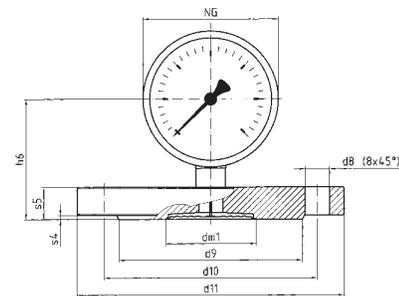
Connection flange as per EN 1092-1/B 1/DN 25/PN 40
Open, 0/100 mbar
Flush mounted, 0/1 bar to 0/6 bar



Flush mounted connection flange as per EN 1092-1/B 1
DN 50/PN 40, 0/100 mbar to 0/25 bar



Flush mounted connection flange as per EN 1092-1/B 1
DN 80/PN 40, 0/40 mbar to 0/25 bar



Dimensions (mm)

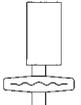
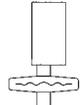
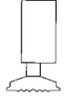
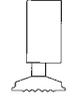
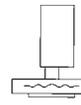
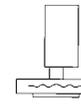
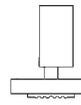
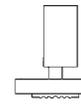
Nominal size (NG)	a	b	c	d1	d2	d3	d4	d5	d6	d7	d8	d9	d10	d11	dm	dm1	D	D1	D2	DN
100	15.6	49	20	68	85	115	4xØ18	102	125	165	8xØ18	138	160	200	48	68	69	78	64	25
160	17.5	50	20	68	85	115	4xØ18	102	125	165	8xØ18	138	160	200	48	68	69	78	64	25
Nominal size (NG)	G	G1	h	h1	h2	h3	h4	h5	h6	s	s1	s2	s3	s4	s5	SW				
100	G½B	4xM12	117	117	86	102	96	86	90	2	30	3	20	3	24	22				
160	G½B	4xM12	148	148	117	133	127	117	121	2	30	3	20	3	24	22				

Stainless steel diaphragm pressure gauges

EN 837-3

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DG: H, PG: 3

Type	PF100E, D402	PF160E, D402	PF100CP, D402	PF160CP, D402	PF100FLO, D402	PF160FLO, D402	PF100FL, D402	PF160FL, D402
Version								
Housing Ø	100	160	100	160	100	160	100	160
Housing	Stainless steel 304							
Measuring element	316 Ti/316 L, ≥ 4 bar Duratherm		Stainless steel 316 L		Stainless steel 316 L, (4 bar and higher Duratherm)		Stainless steel 316 Ti/316 L, (4 bar and higher Duratherm)	
Flanges	Stainless steel 316 Ti/316 L							
Accuracy class	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Connection	G½B	G½B	Clamp 2" ISO 2852	Clamp 2" ISO 2852	Open connection flange as per EN 1092-1/ B 1/DN 25/PN 40		Flush mounted connection flange as per EN 1092-1/ B 1/DN 50/PN 40	
Range (mbar)	Part no.	Part no.	Part no.					
Price €								
0/100	85886402	85926402	---	---	88906402	88926402	88946402	88966402
0/160	85887402	85927402	---	---	88907402	88927402	88947402	88967402
0/250	85888402	85928402	---	---	88908402	88928402	88948402	88968402
0/400	85889402	85929402	---	---	88909402	88929402	88949402	88969402
Range (mbar)								
Price €								
0/0,6	85890402	85930402	---	---	88910402	88930402	88950402	88970402
0/1	85891402	85931402	88980402	88990402	88911402	88931402	88951402	88971402
0/1,6	85892402	85932402	88981402	88991402	88912402	88932402	88952402	88972402
0/2,5	85893402	85933402	88982402	88992402	88913402	88933402	88953402	88973402
Price €								
0/4	85894402	85934402	88983402	88993402	88914402	88934402	88954402	88974402
0/6	85895402	85935402	88984402	88994402	88915402	88935402	88955402	88975402
0/10	85896402	85936402	---	---	88916402	88936402	88956402	88976402
0/16	85897402	85937402	---	---	88917402	88937402	88957402	88977402
0/25	85898402	85938402	---	---	88918402	88938402	88958402	88978402

Blue part no. = in-stock items

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See page 129 for extra charges.

Extra charges for stainless steel diaphragm pressure gauges

DG: H

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Process connection			Price €
Groove/tongue as per EN 1092-1			
Connection G $\frac{1}{4}$ B (channel hole \varnothing 6 mm)			
Connection $\frac{1}{4}$ NPT (channel hole \varnothing 6 mm)			
Connection $\frac{1}{2}$ NPT (channel hole \varnothing 10 mm)			
Connection M20 x 1.5 (channel hole \varnothing 10 mm)			
Other connection threads			On request
Channel hole \varnothing 10 mm with connection G $\frac{1}{2}$ B			Standard
VARIVENT [®] /VARINLINE [®]	Type N (D=68 mm)	PN 25	On request
Neumo BioControl	D65 and D80	PN 25	On request
Flush mounted connection flange as per EN 1092-1/B1 (extra charge over and above connection G $\frac{1}{2}$ B)	Nominal diameter	Nominal pressure	Price €
	DN 25 (0/1 bar to 0/6 bar)	PN 40	
	DN 50	PN 40	
	DN 80	PN 40	
Other connection flanges			On request
Special coating for diaphragm and lower flange (only for flush mounting connection flange)	Nominal diameter	Nominal pressure	Price €
PTFE coating	DN 25	PN 40	
PTFE coating	DN 50	PN 40	
PTFE coating	DN 80	PN 40	
PFA coating	DN 25	PN 40	
PFA coating	DN 50	PN 40	
PFA coating	DN 80	PN 40	
Other materials			On request
Glycerine filling			Price €
Nominal size 100			
Nominal size 160			
Other			Price €
Vacuum proof (\geq 0/4 bar)			Standard
Electrical contacts (\geq 0/0.6 bar)			See page 117.